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Fig 1 A

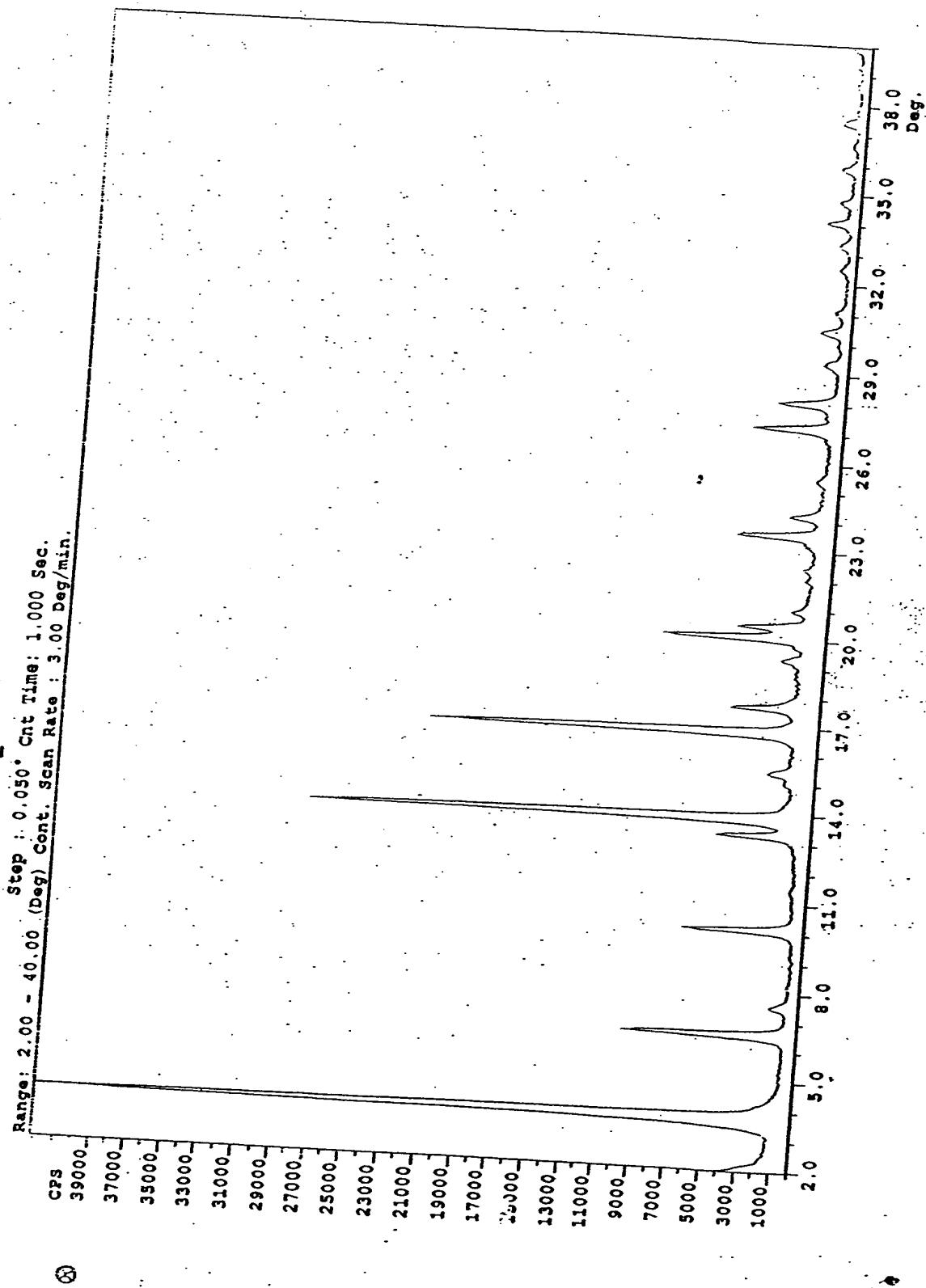


Fig. 2 C

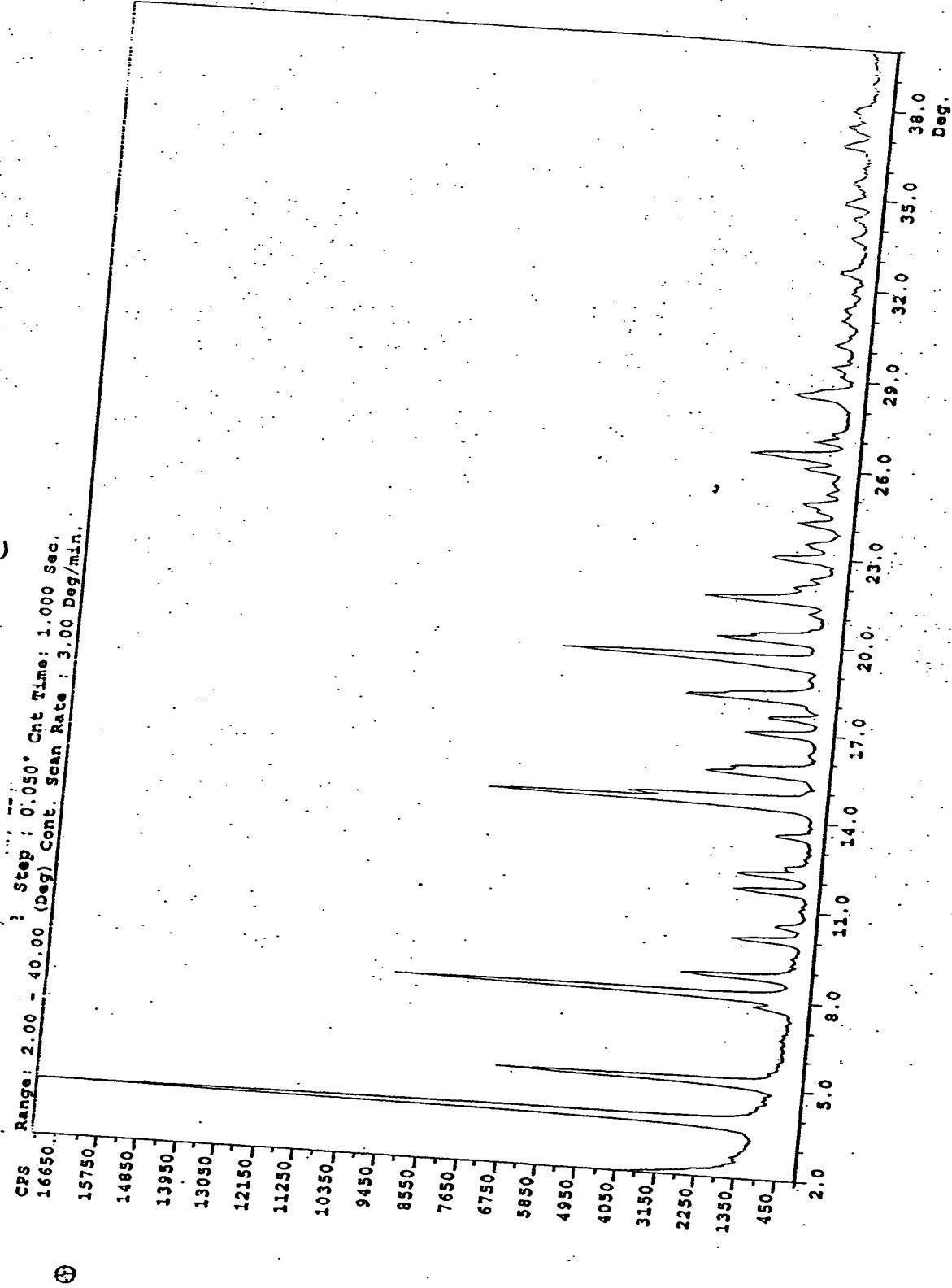


Fig 3 D

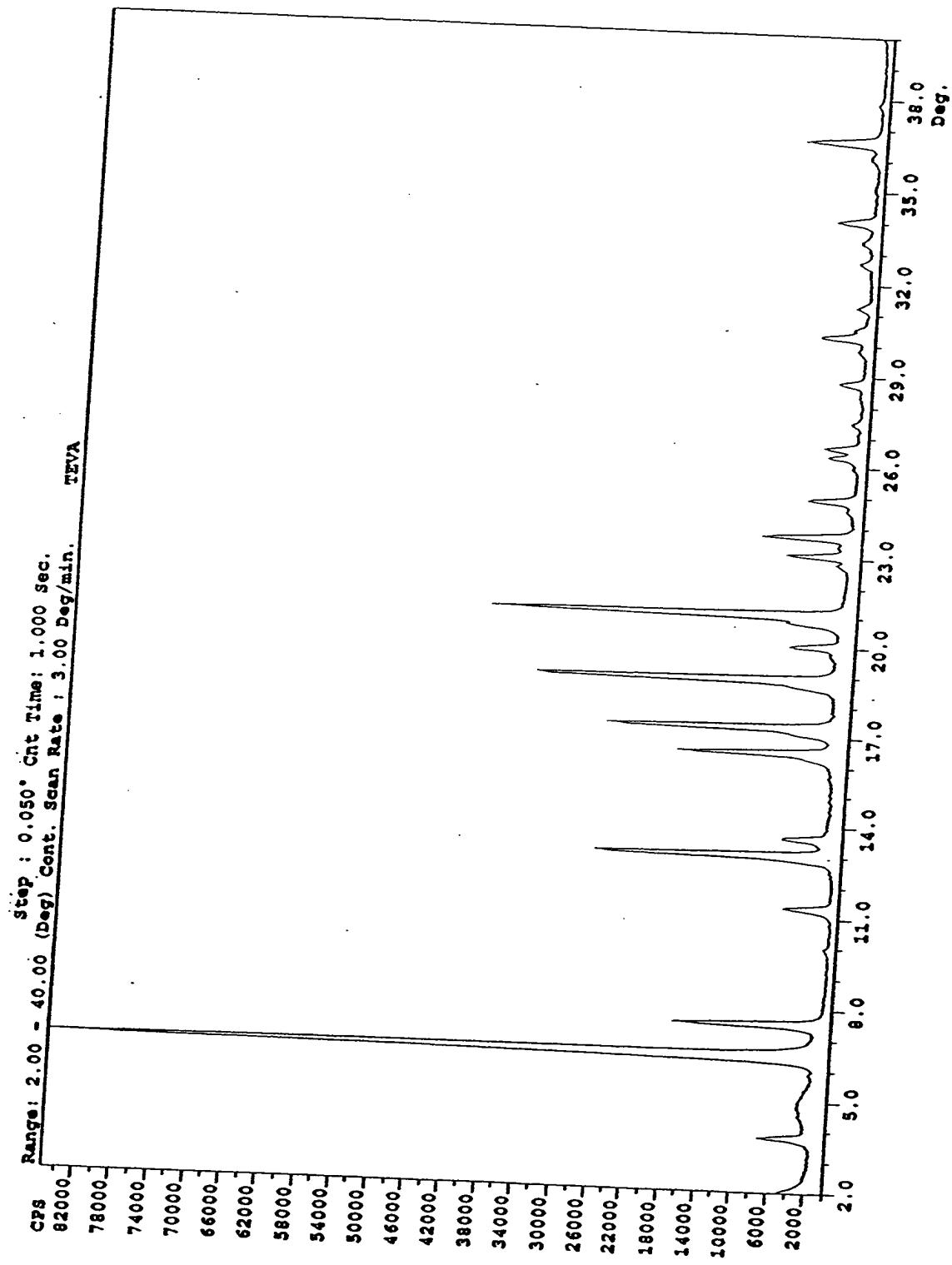


Fig 4 E

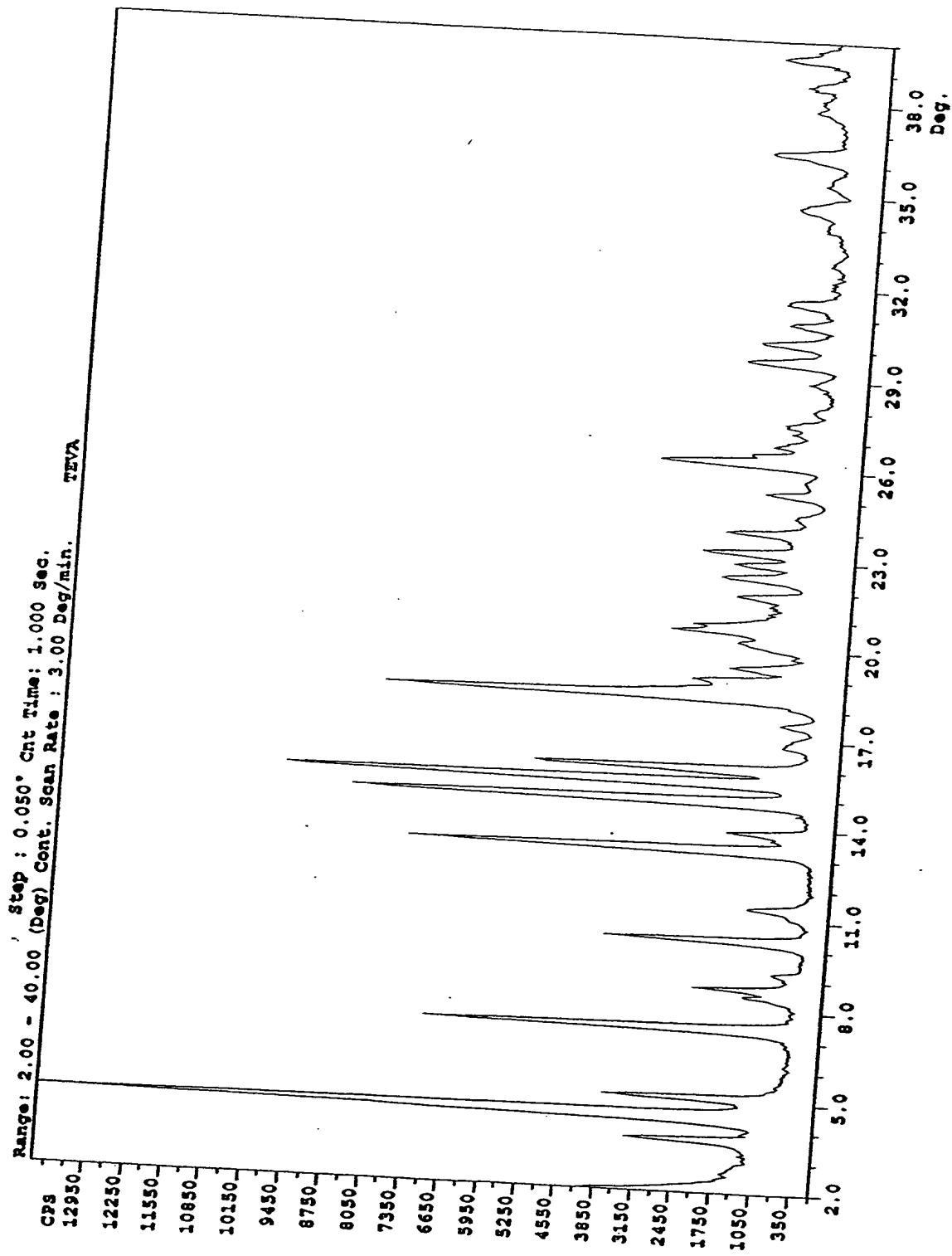


Fig. 5

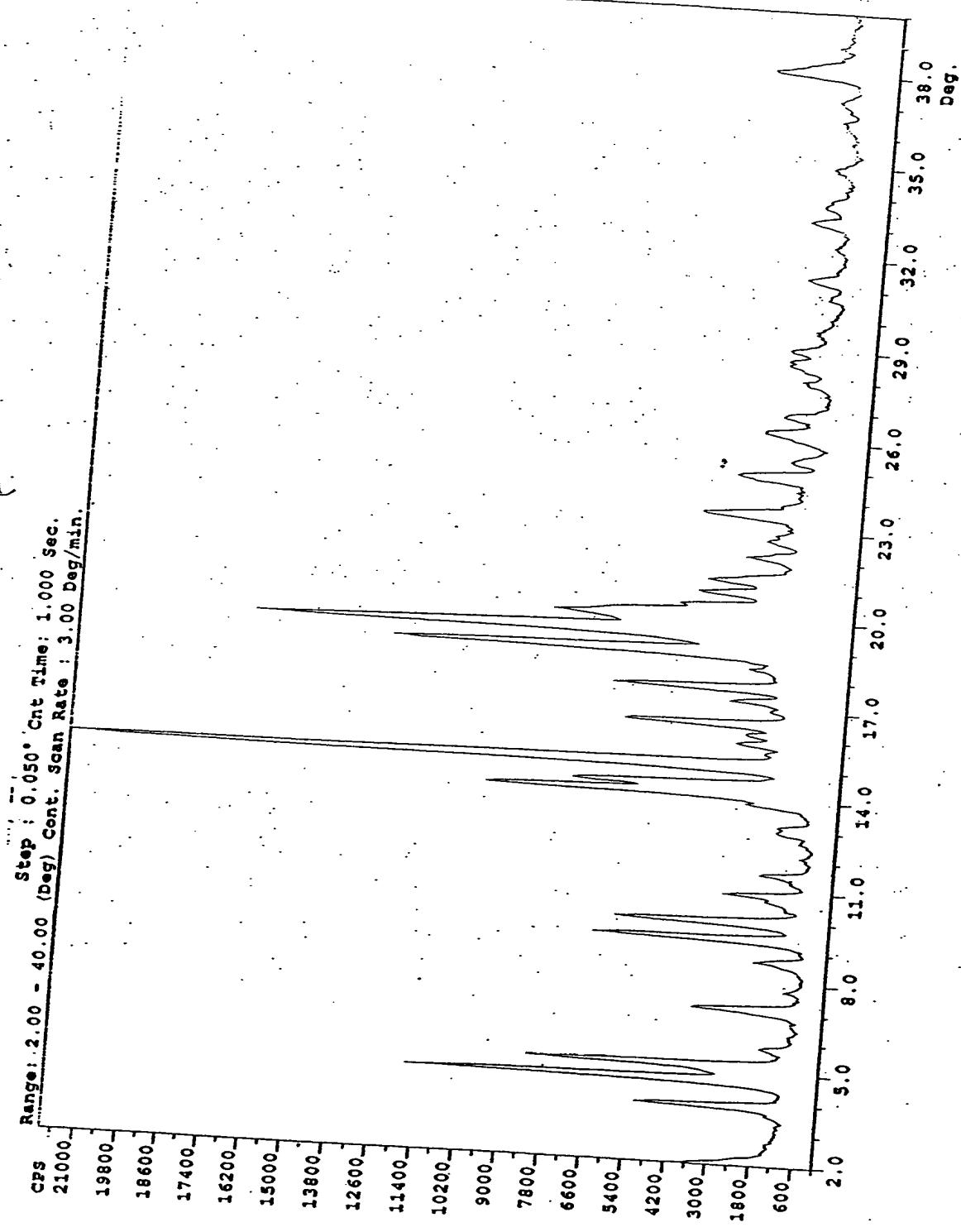


Fig. 6

G

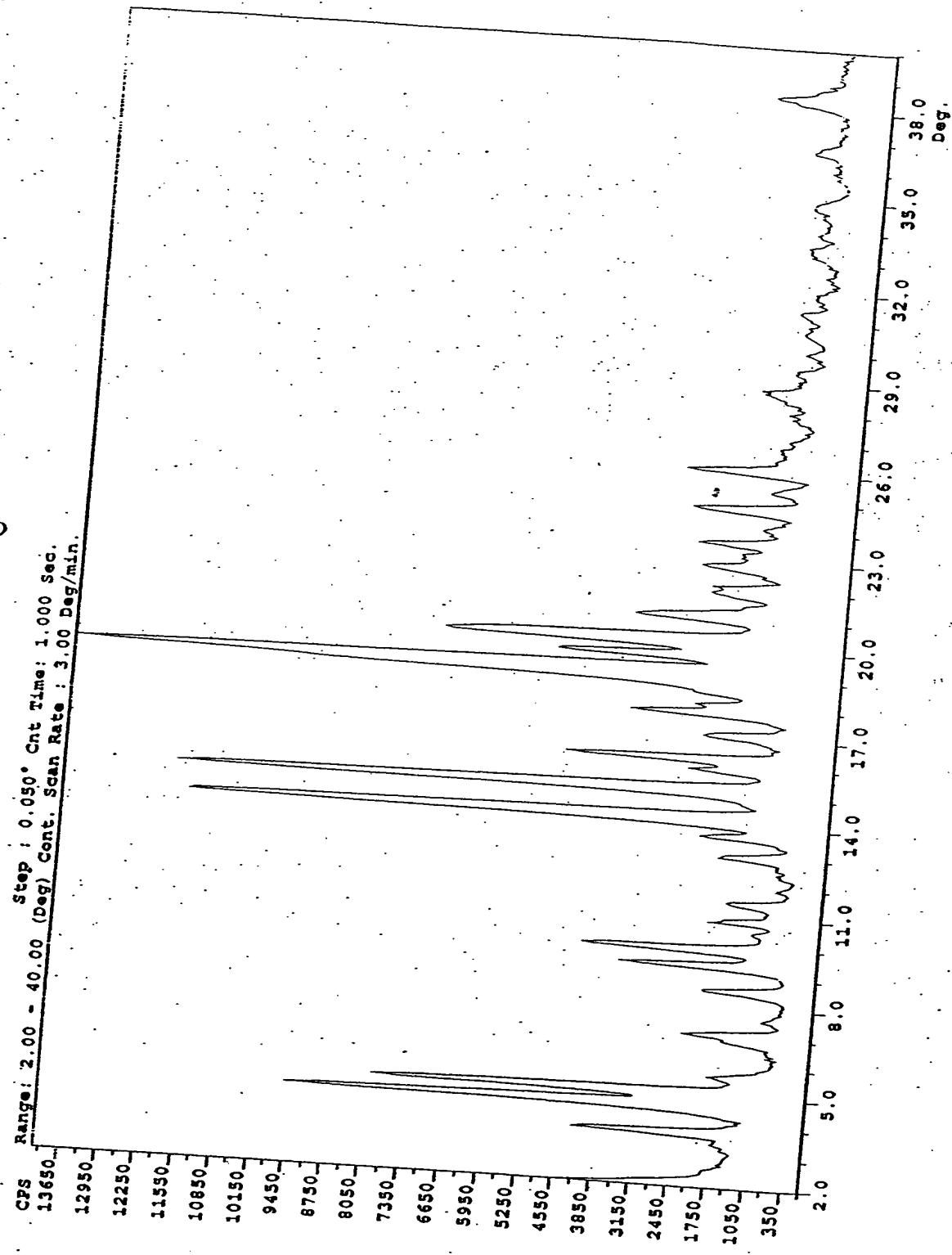


Fig. 7 τ

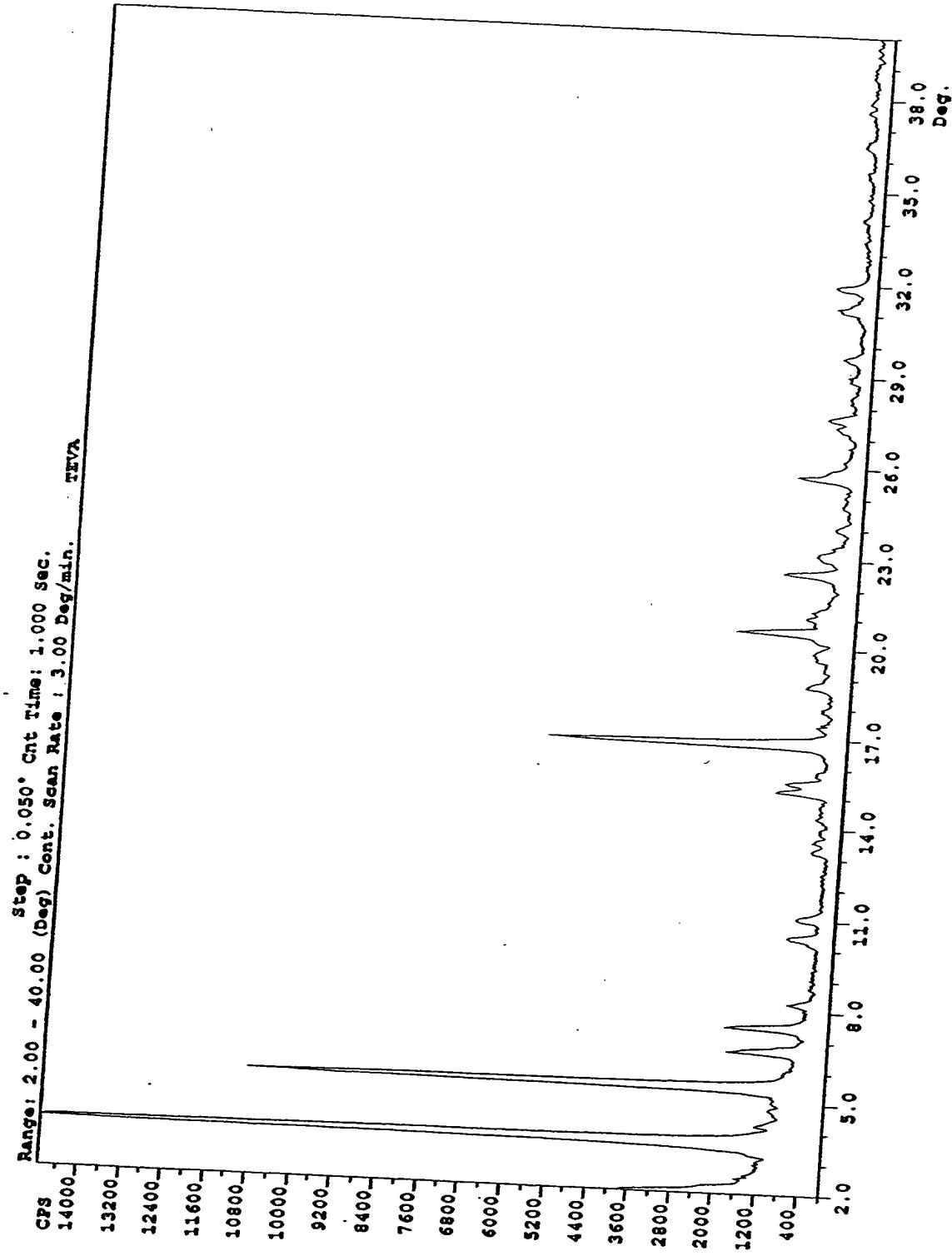


Fig. 8
5

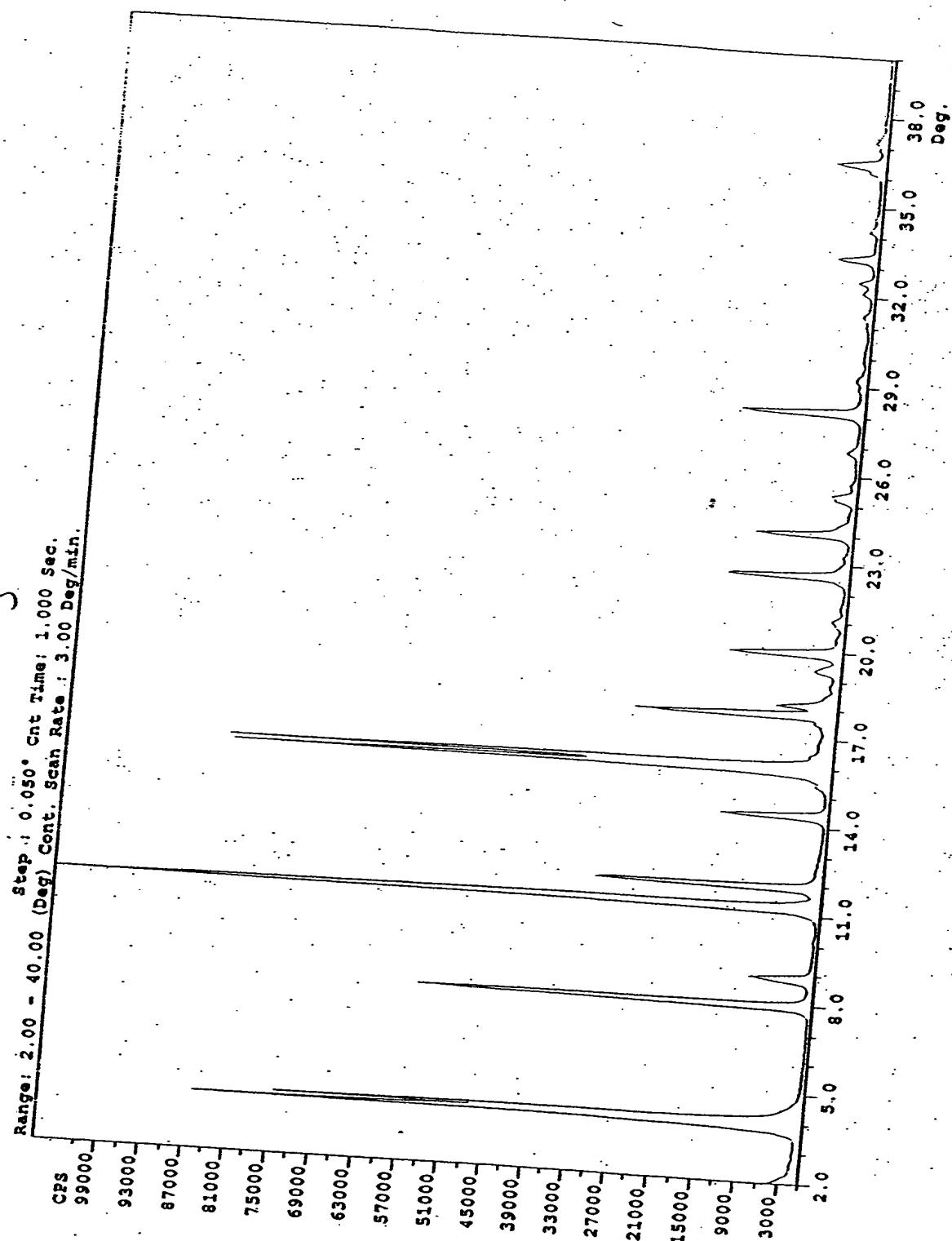


Fig. 9

K

CPS
Range: 2.00 - 40.00 Step : 0.050° Cnt Time: 1.000 Sec.
27300
25900
24500
23100
21700
20300
18900
17500
16100
14700
13300
11900
10500
9100
7700
6300
4900
3500
2100
2.0

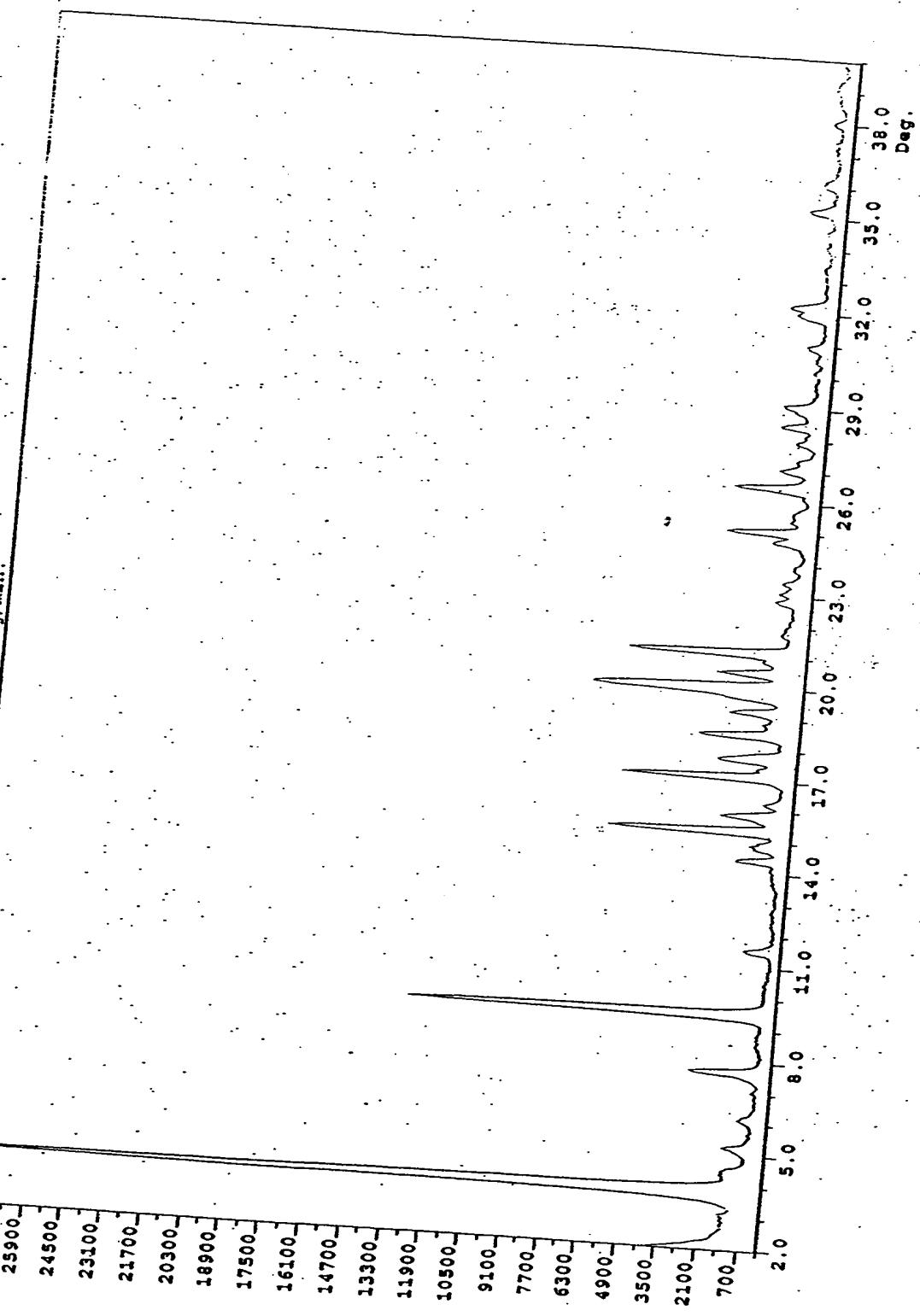


Fig. 10 L

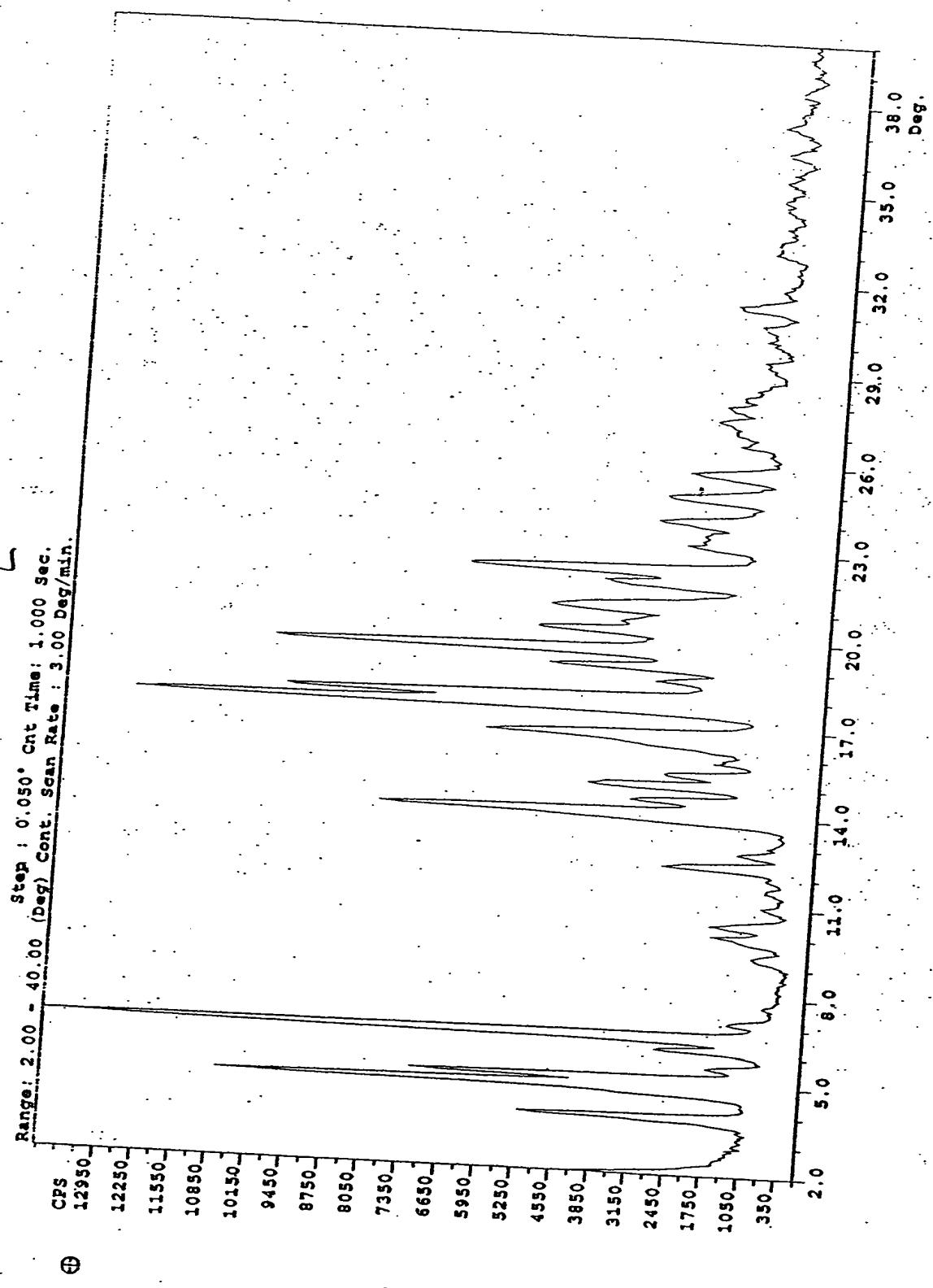


Fig. 11

Range: 2.00 - 40.00. Step : 0.050. Cnt Time: 1.000 SEC.
CPS
7000
6600
6200
5800
5400
5000
4600
4200
3800
3400
3000
2600
2200
1800
1400
1000
600
200

2.0 5.0 8.0 11.0 14.0 17.0 20.0 23.0 26.0 29.0 32.0 35.0 38.0
Deg.

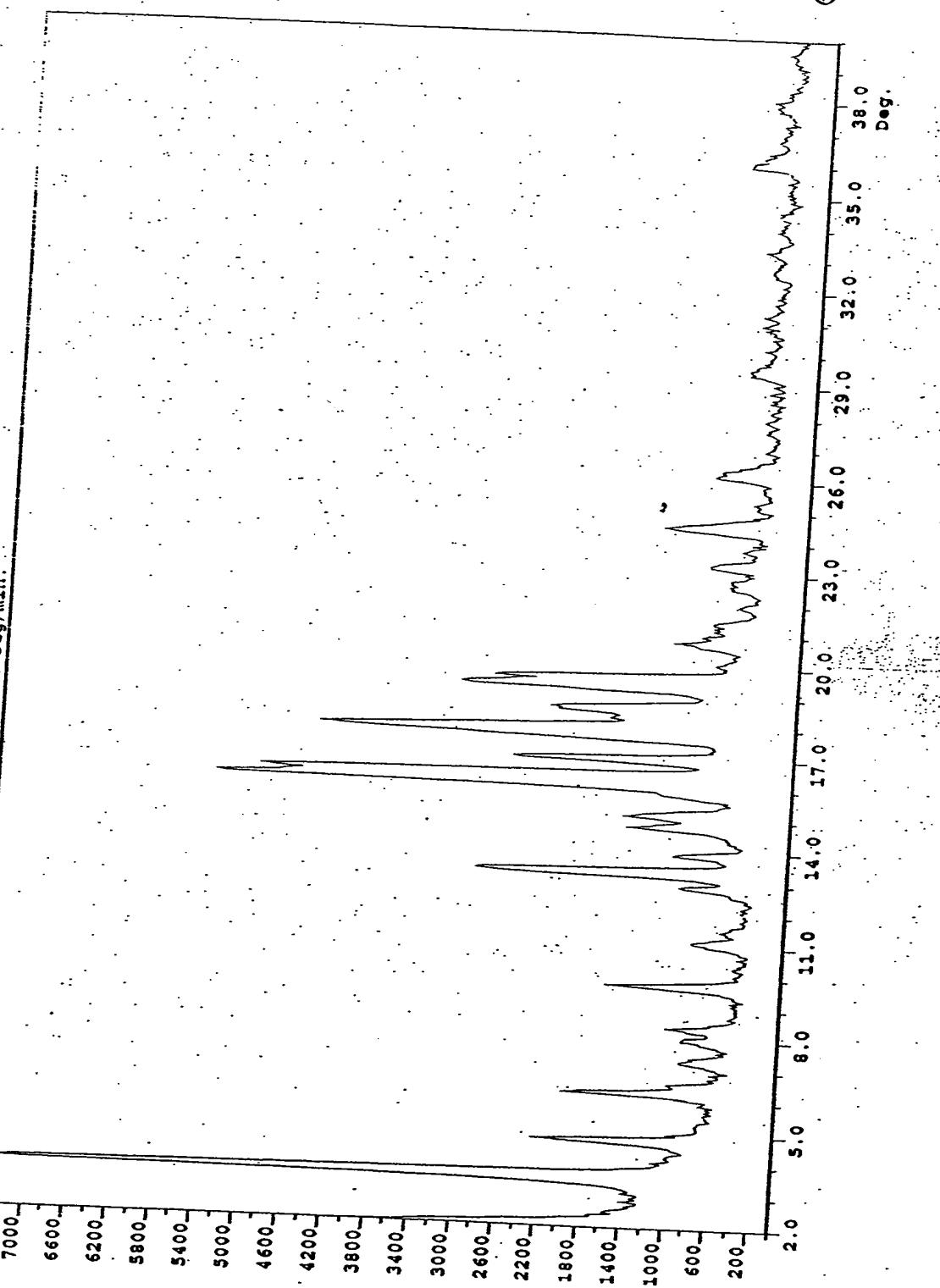


Fig. 12

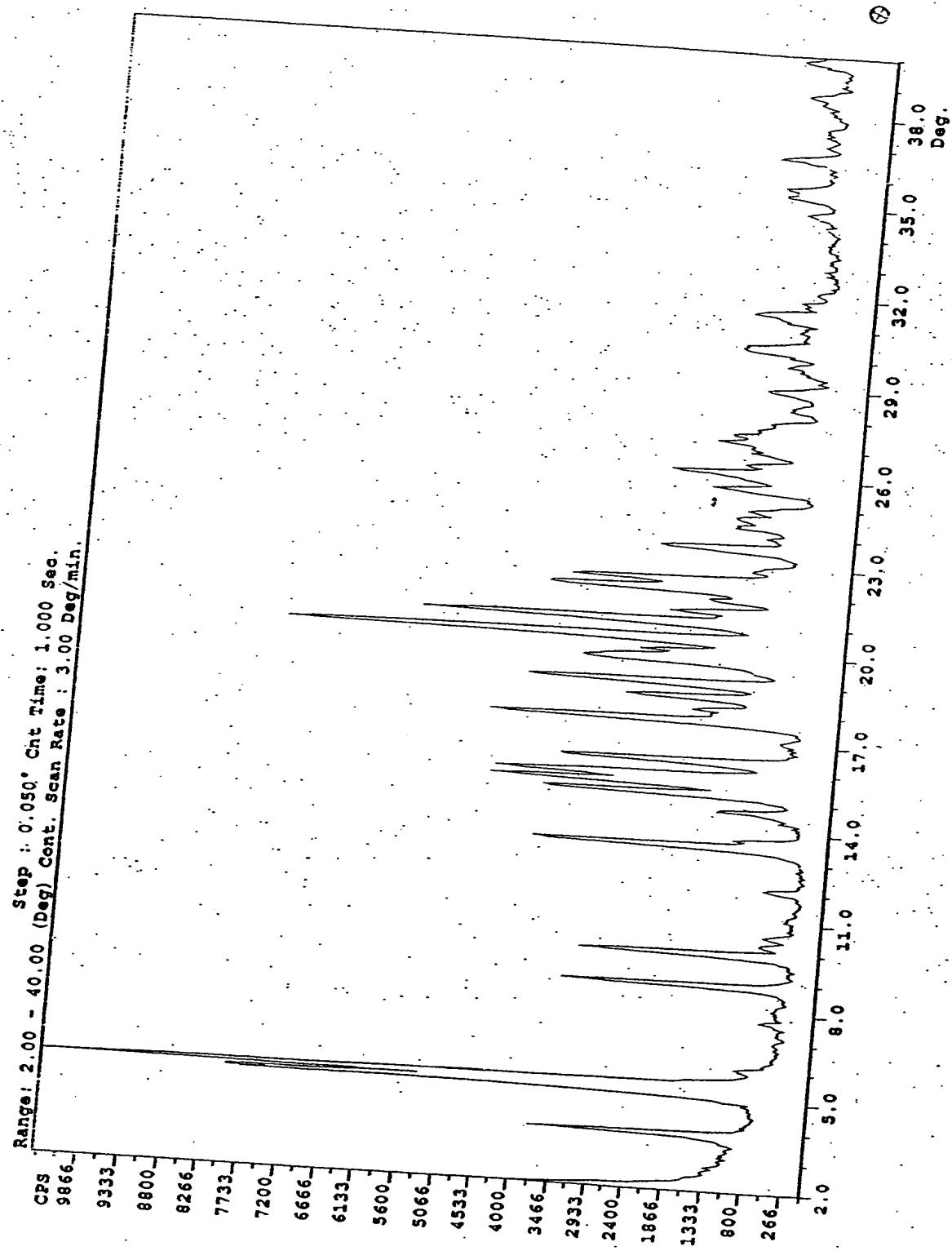


Fig. 13 O

Range: 2.00 - 40.00 Step: 0.050° Cnt Time: 1.000 Sec.
CPS 17500
16500
15500
14500
13500
12500
11500
10500
9500
8500
7500
6500
5500
4500
3500
2500
1500
500

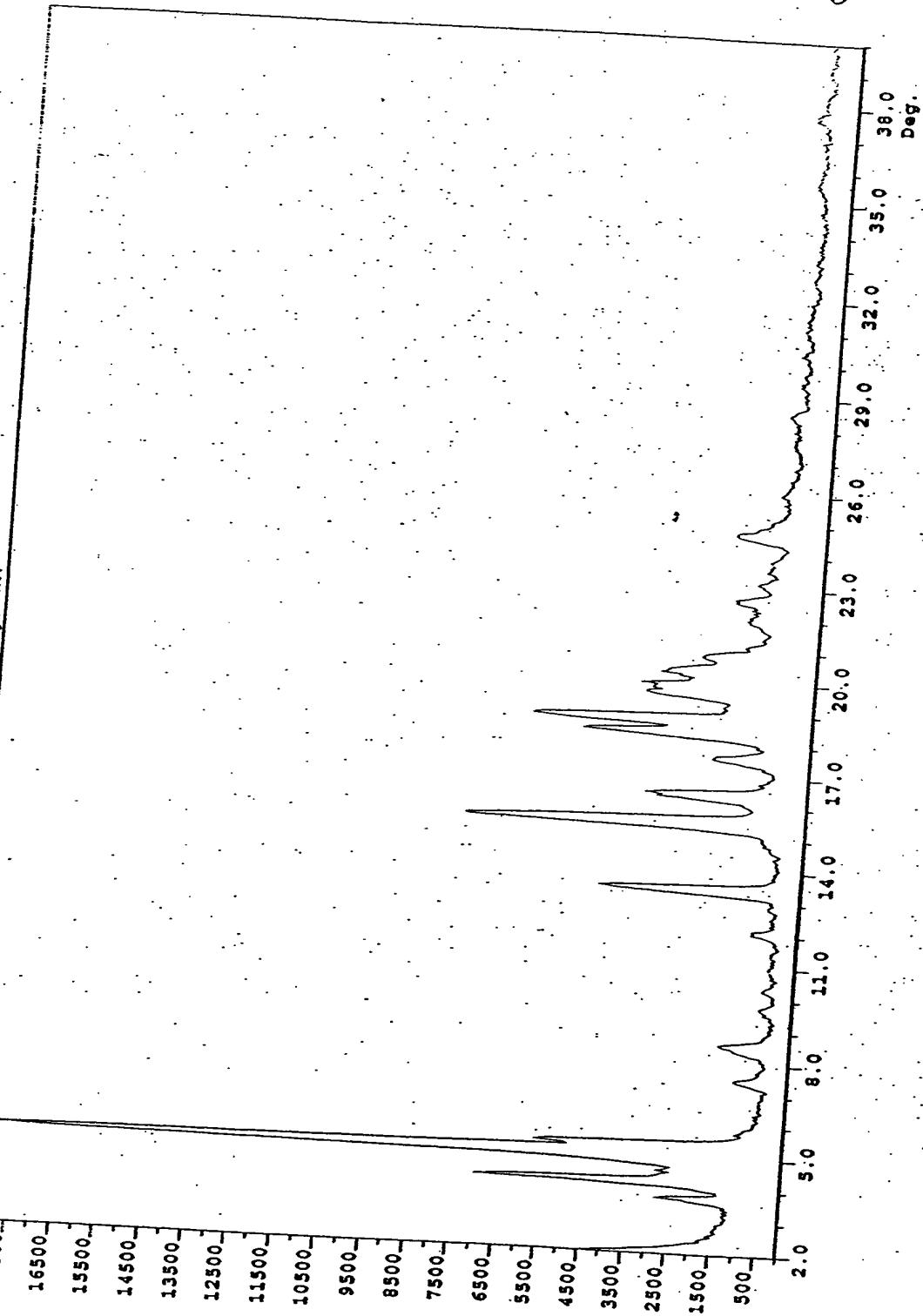


Fig. 14

P

Range: 2.00 - 40.00 Step: 0.050° Cnt Time: 1.000 Sec.
CPS (Deg) Cont. Scan Rate: 3.00 Deg/min.

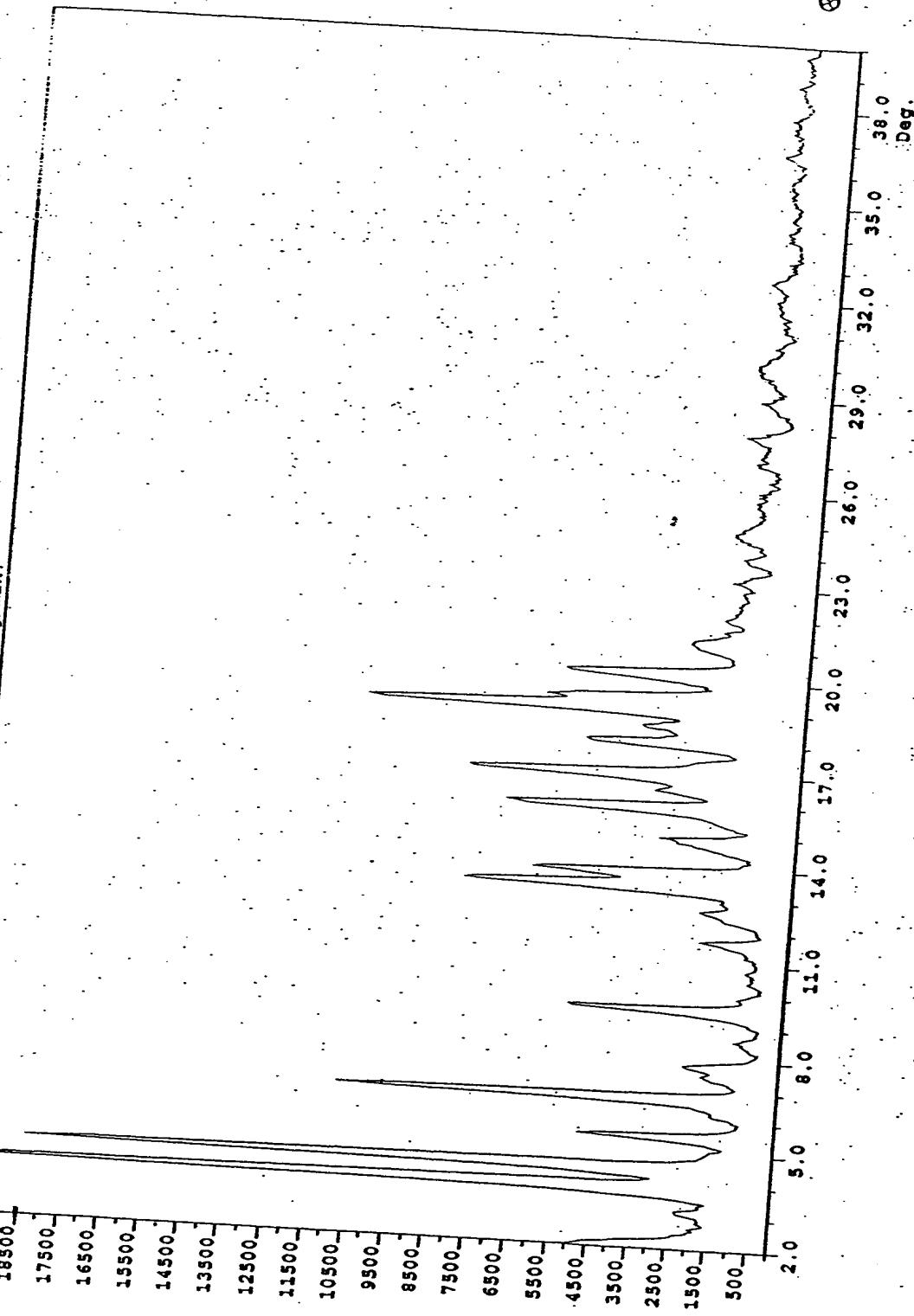
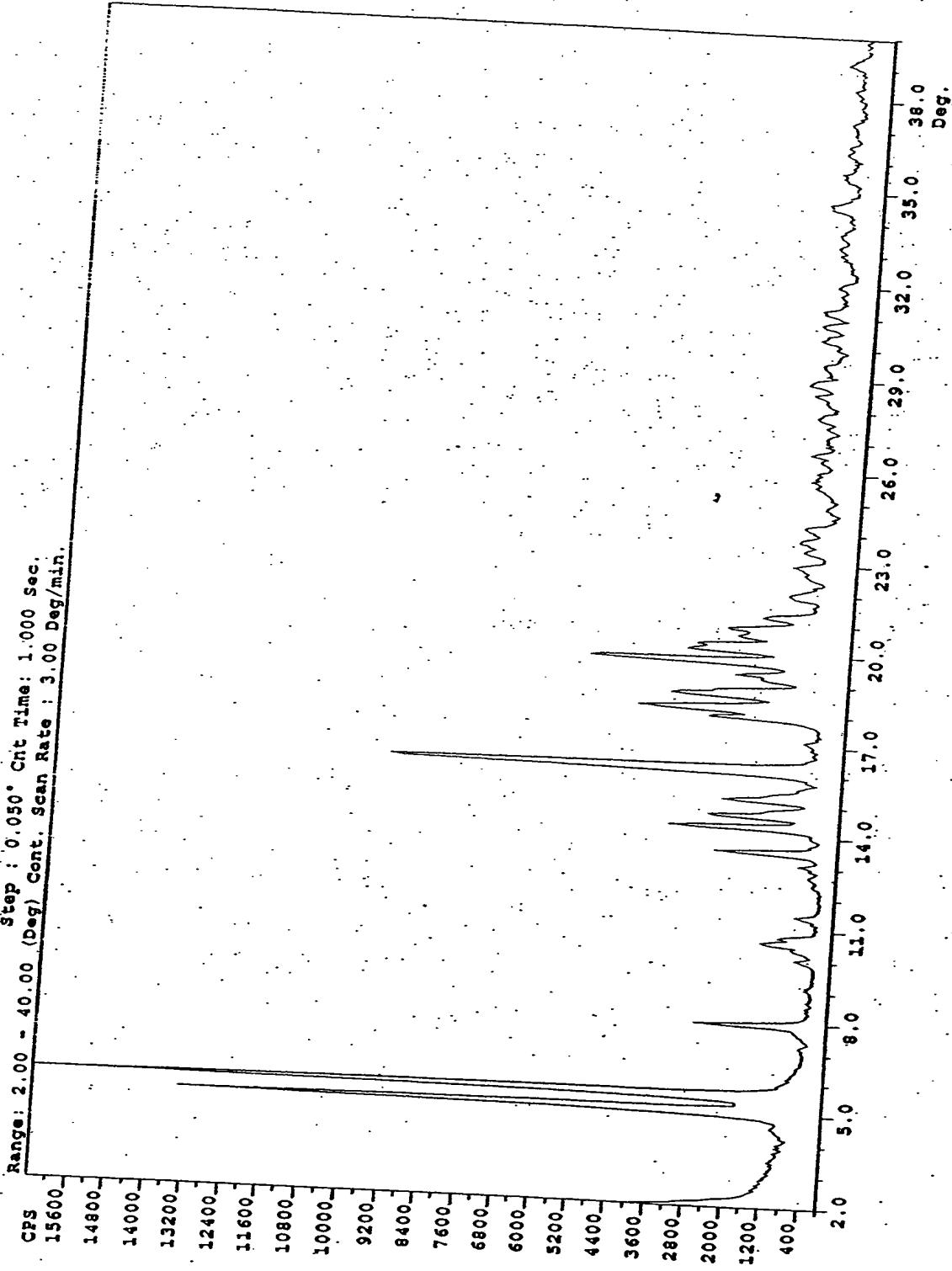


Fig. 15

Q

Range: 2.00 - 40.00 (Deg) Cont. Scan Time: 1.000 Sec.
Step : 0.050° (Deg) Scan Rate : 3.00 Deg/min.



4, J. 16

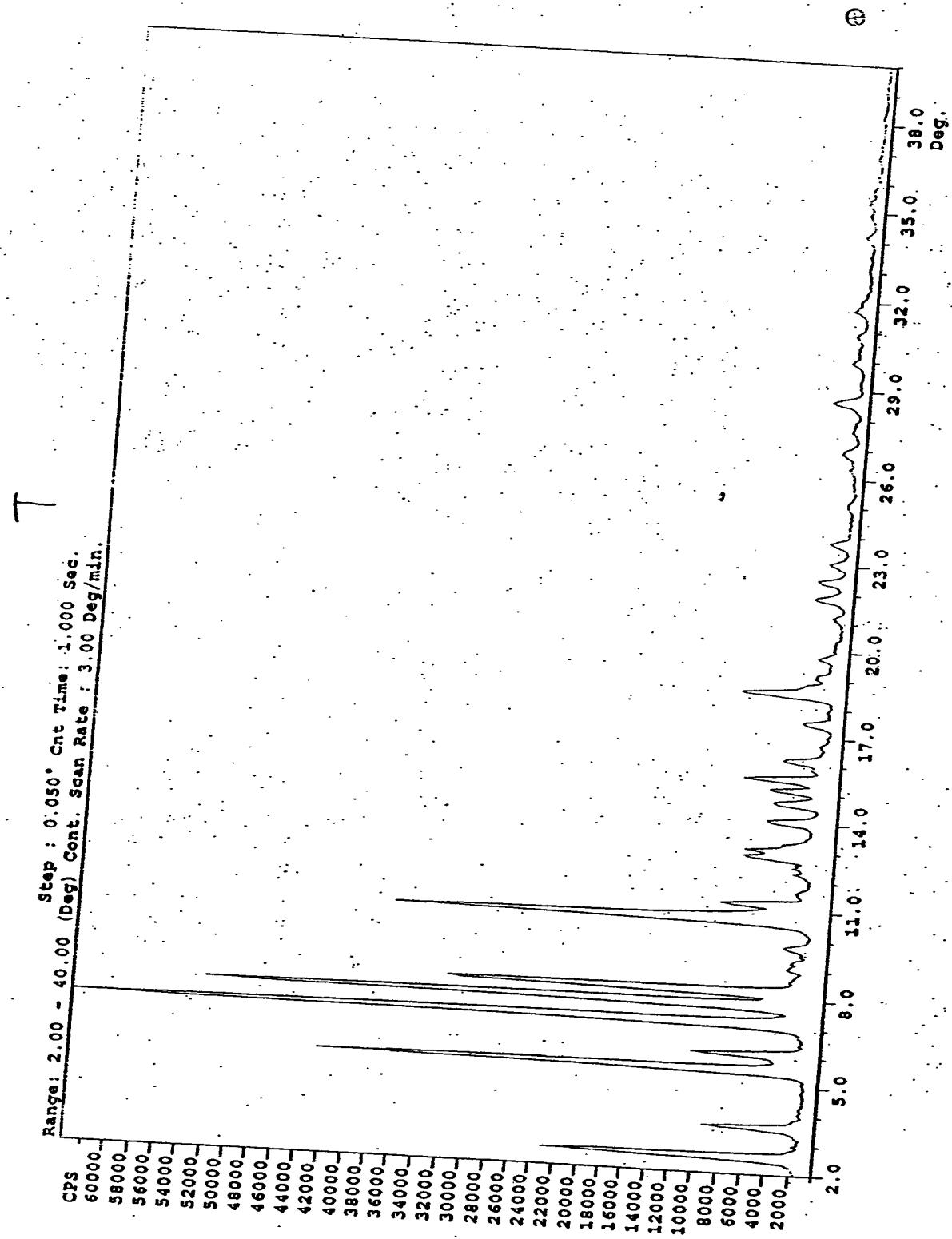


Fig. 17

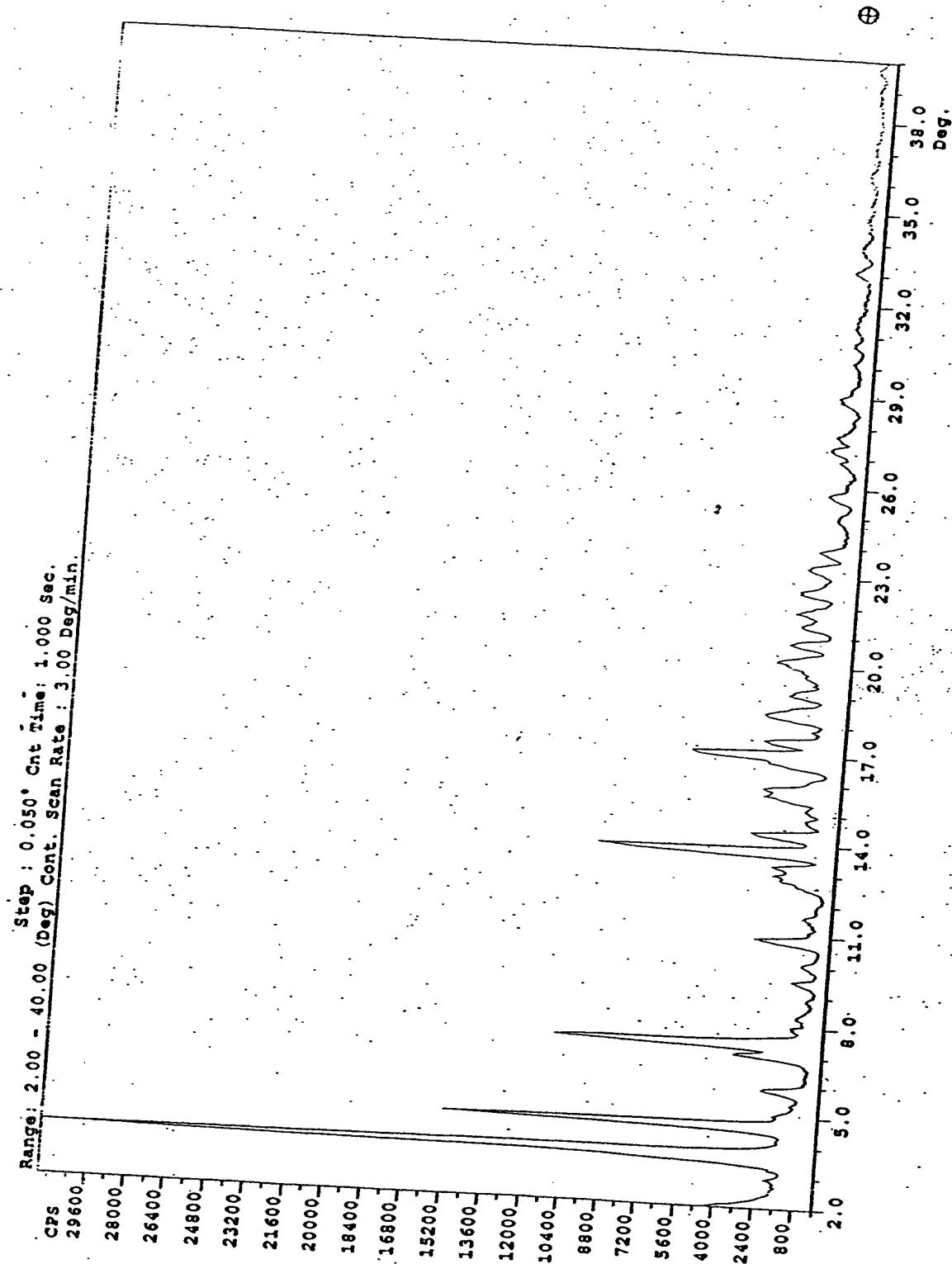


Fig. 18

V

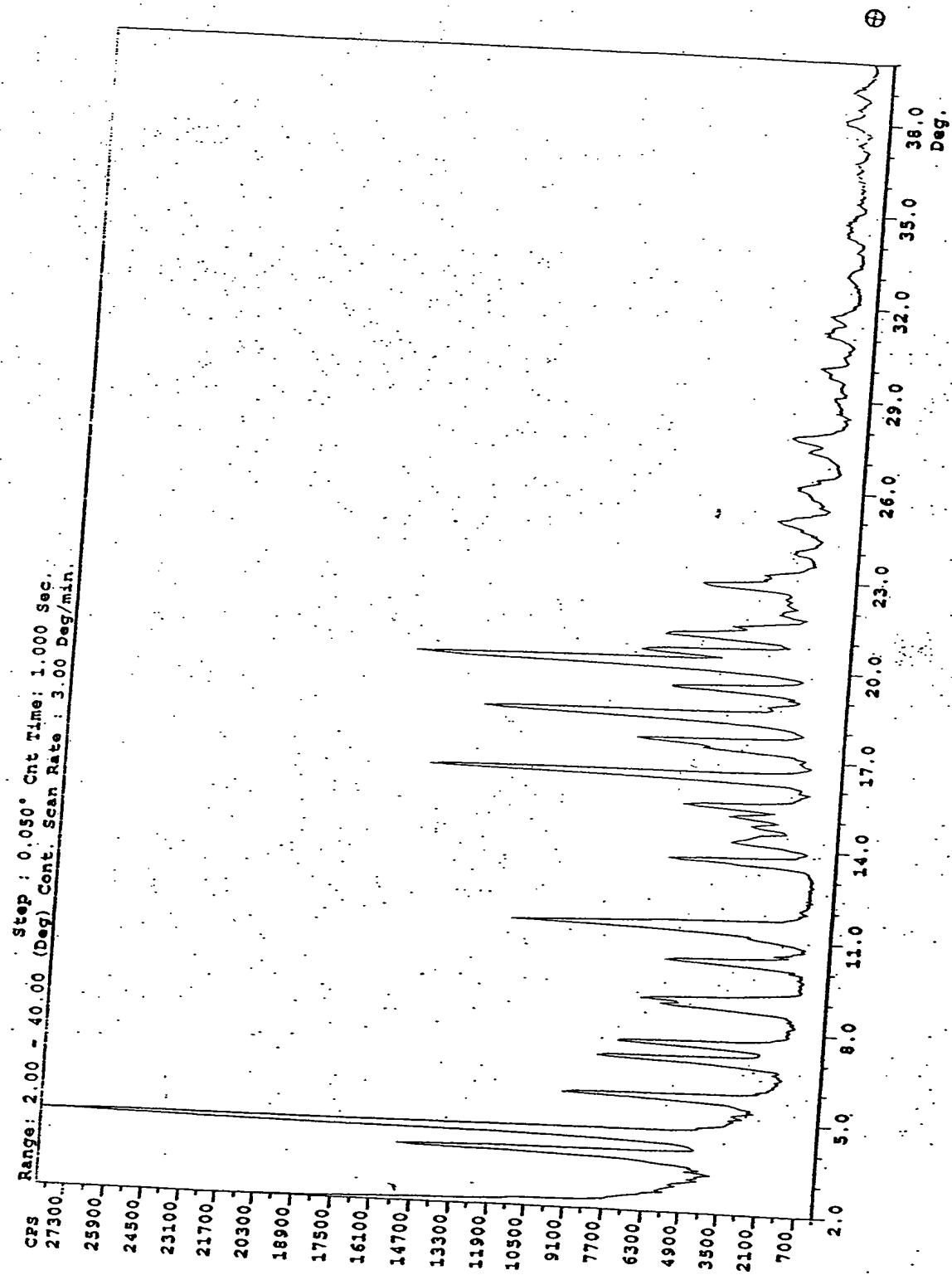


Fig 19

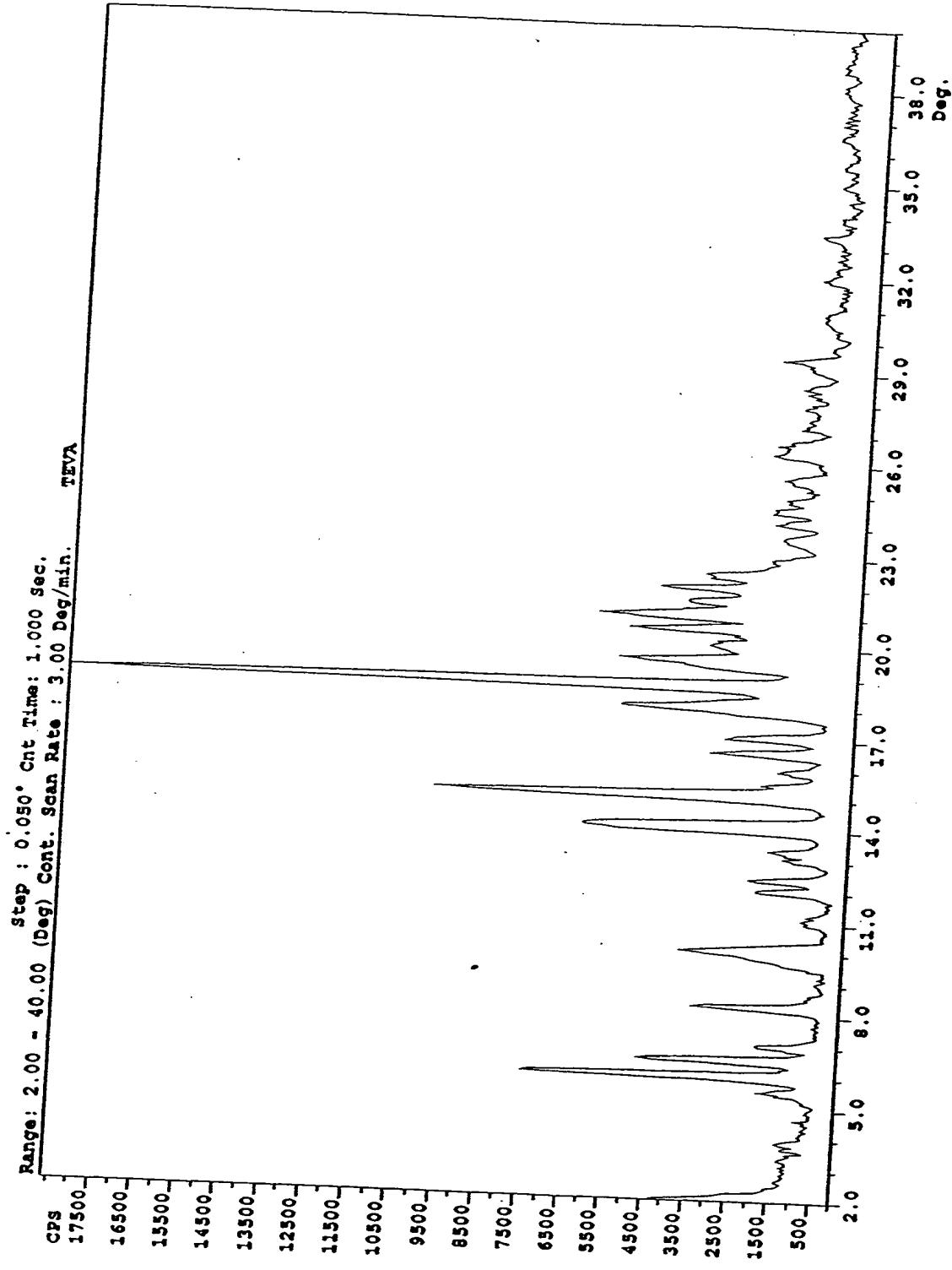


Figure 20 - Natta-g line Form Z

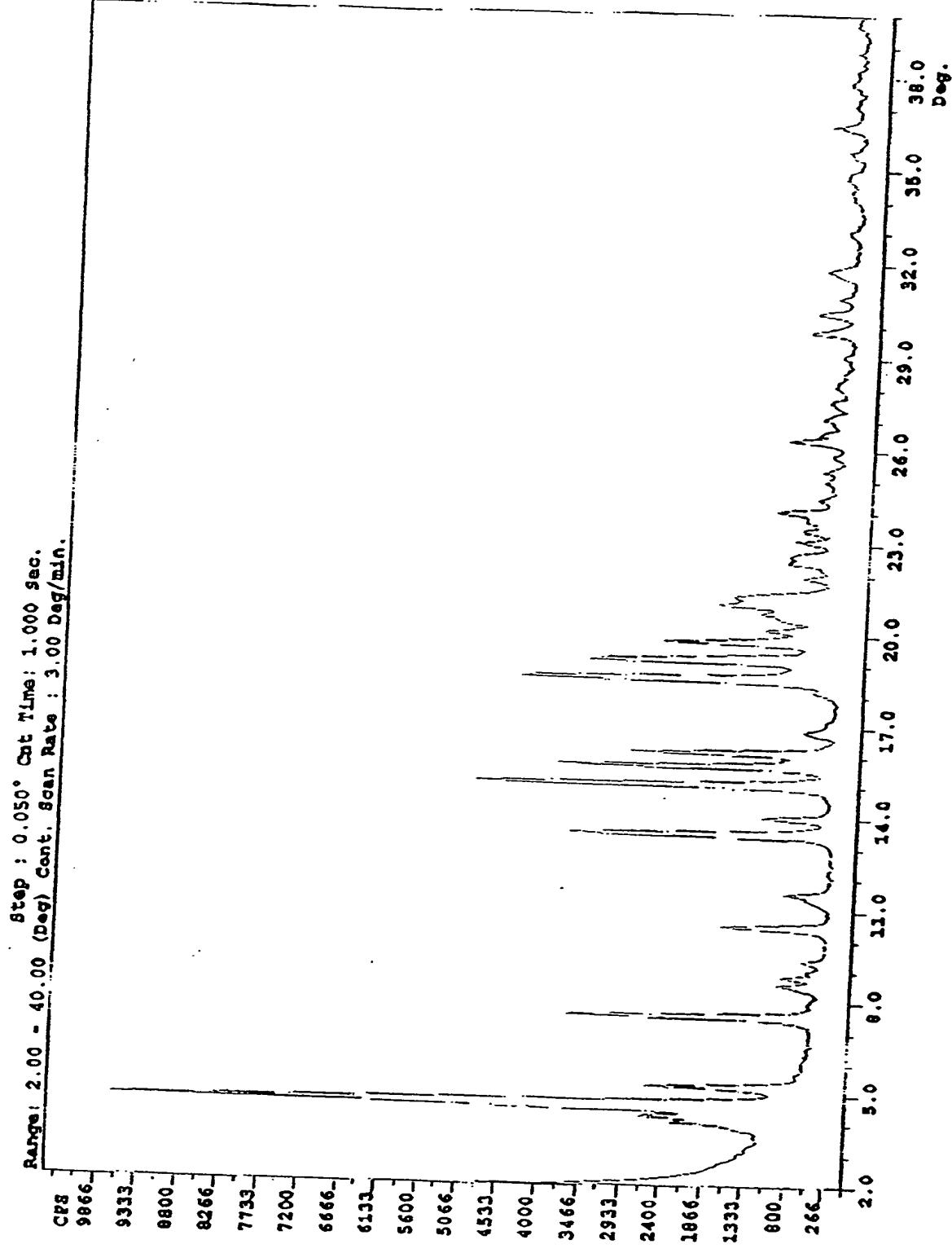


Fig 24 α

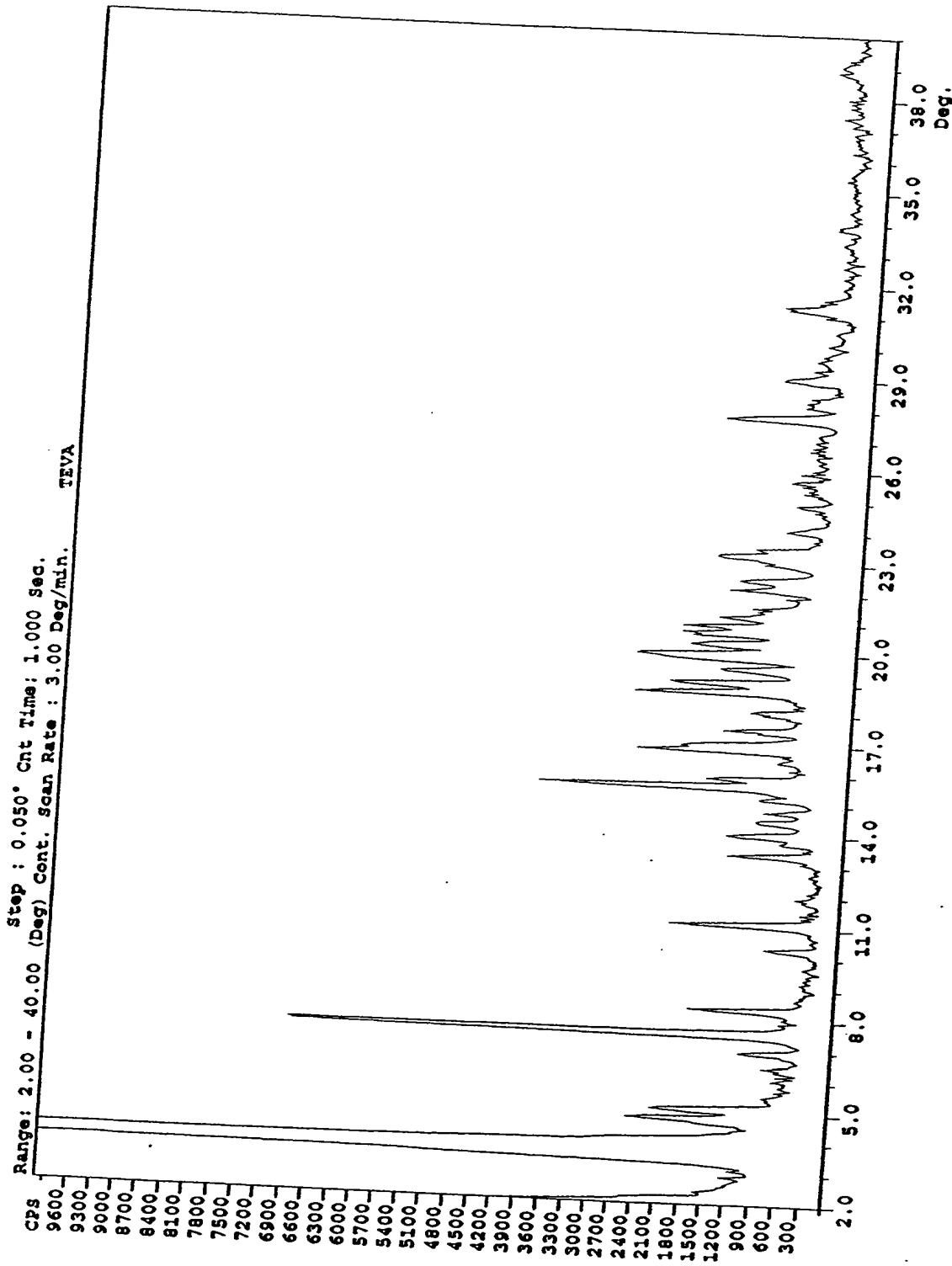


Fig. 2a β

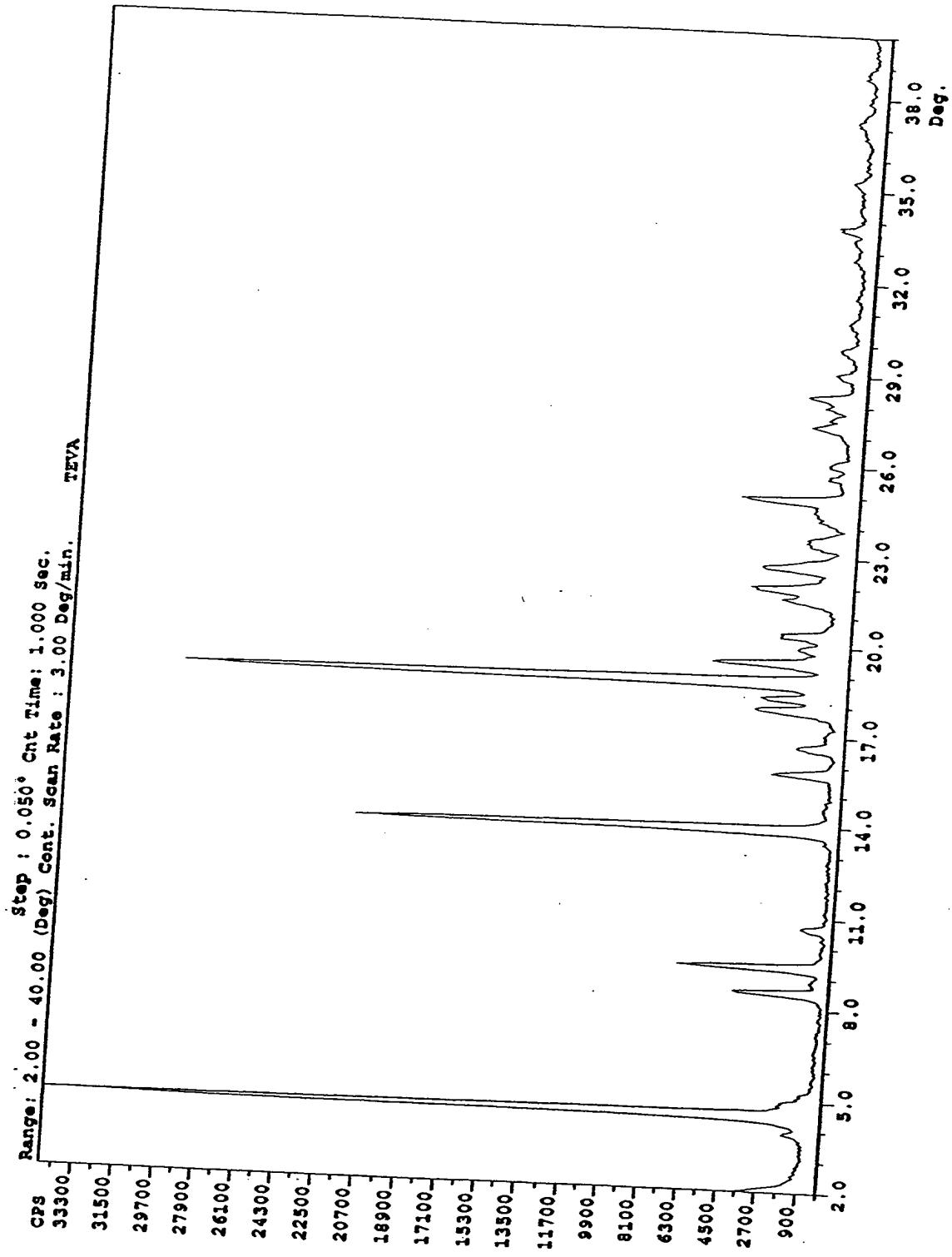
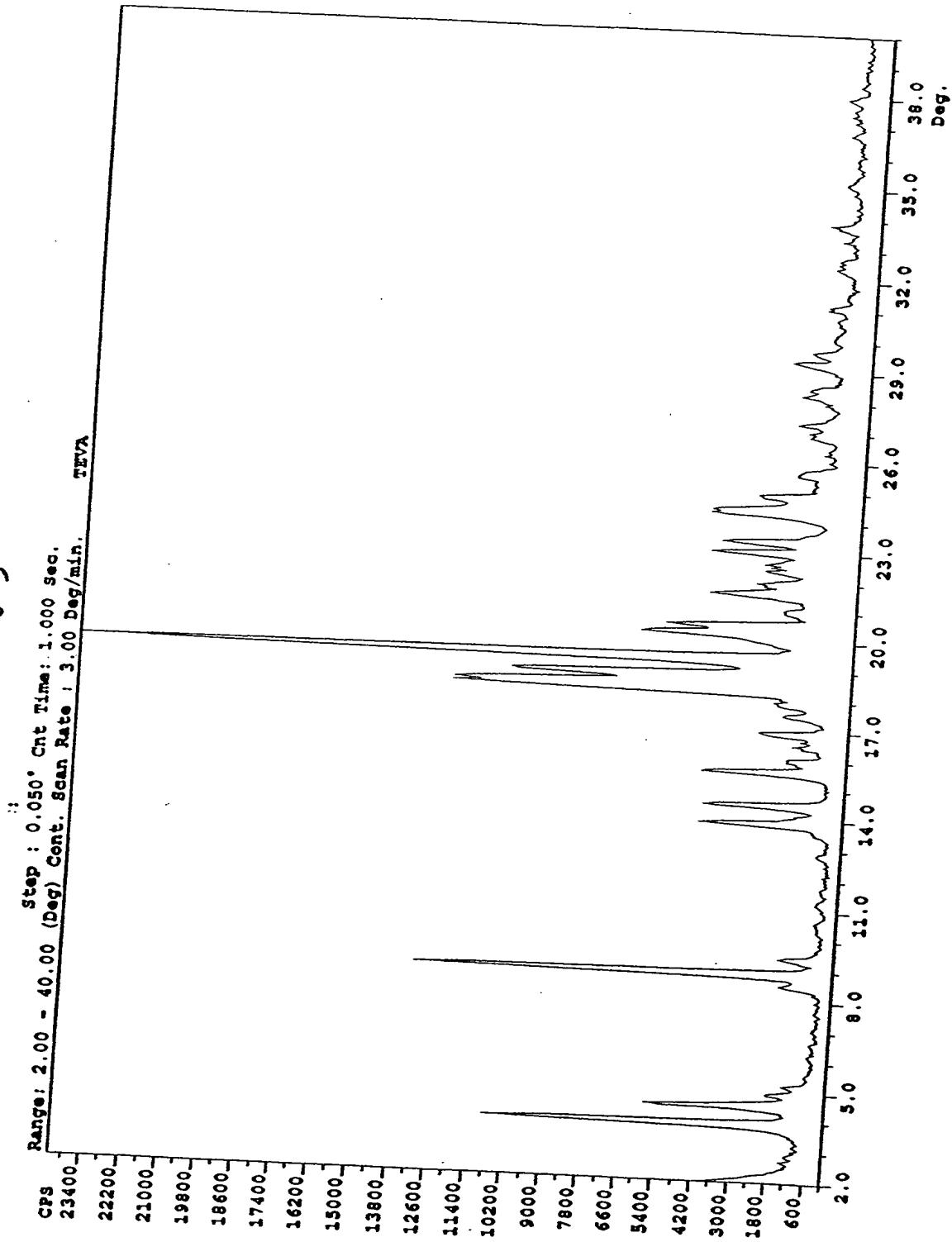


Fig 23 β



5

Aug 24

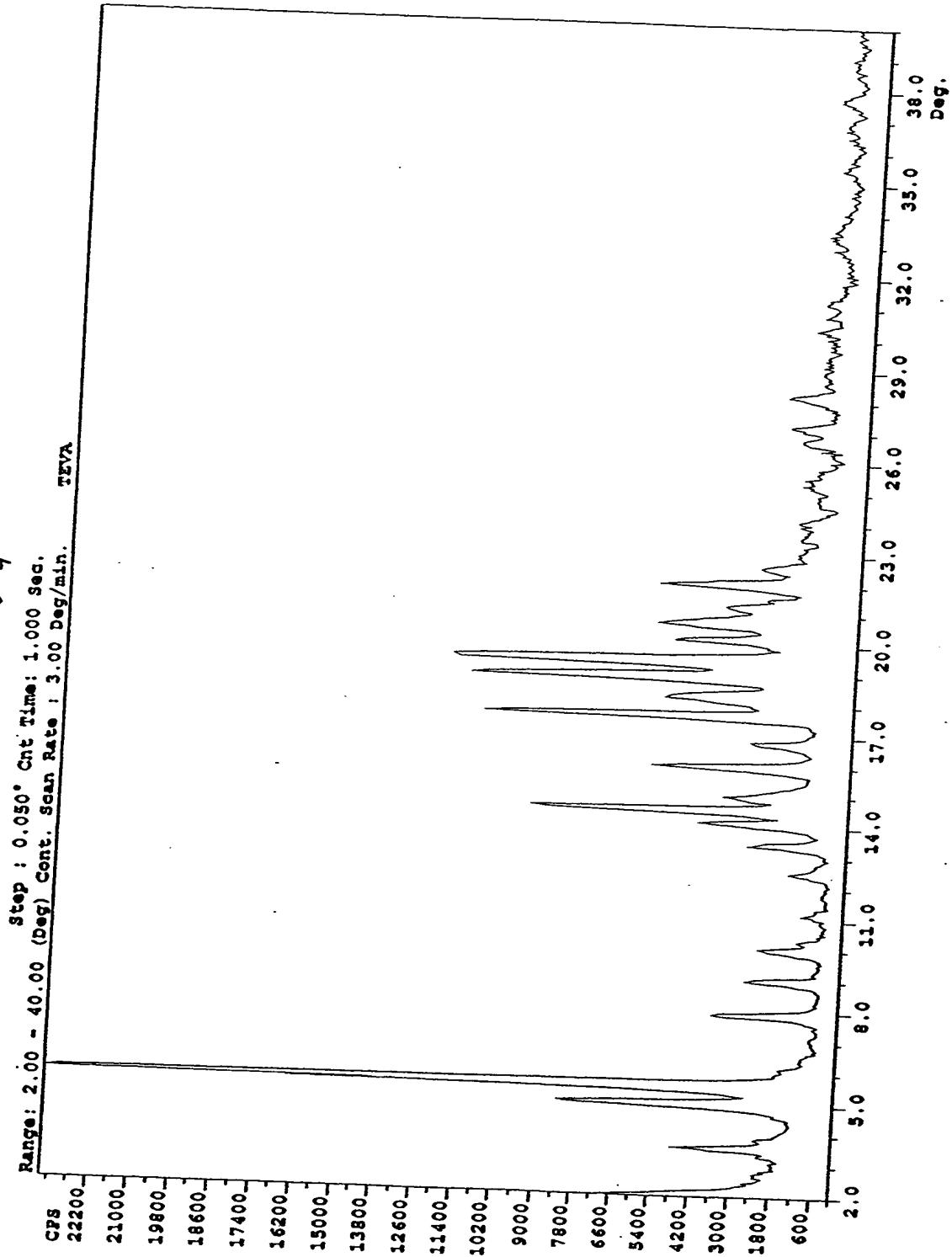


Fig 25
E

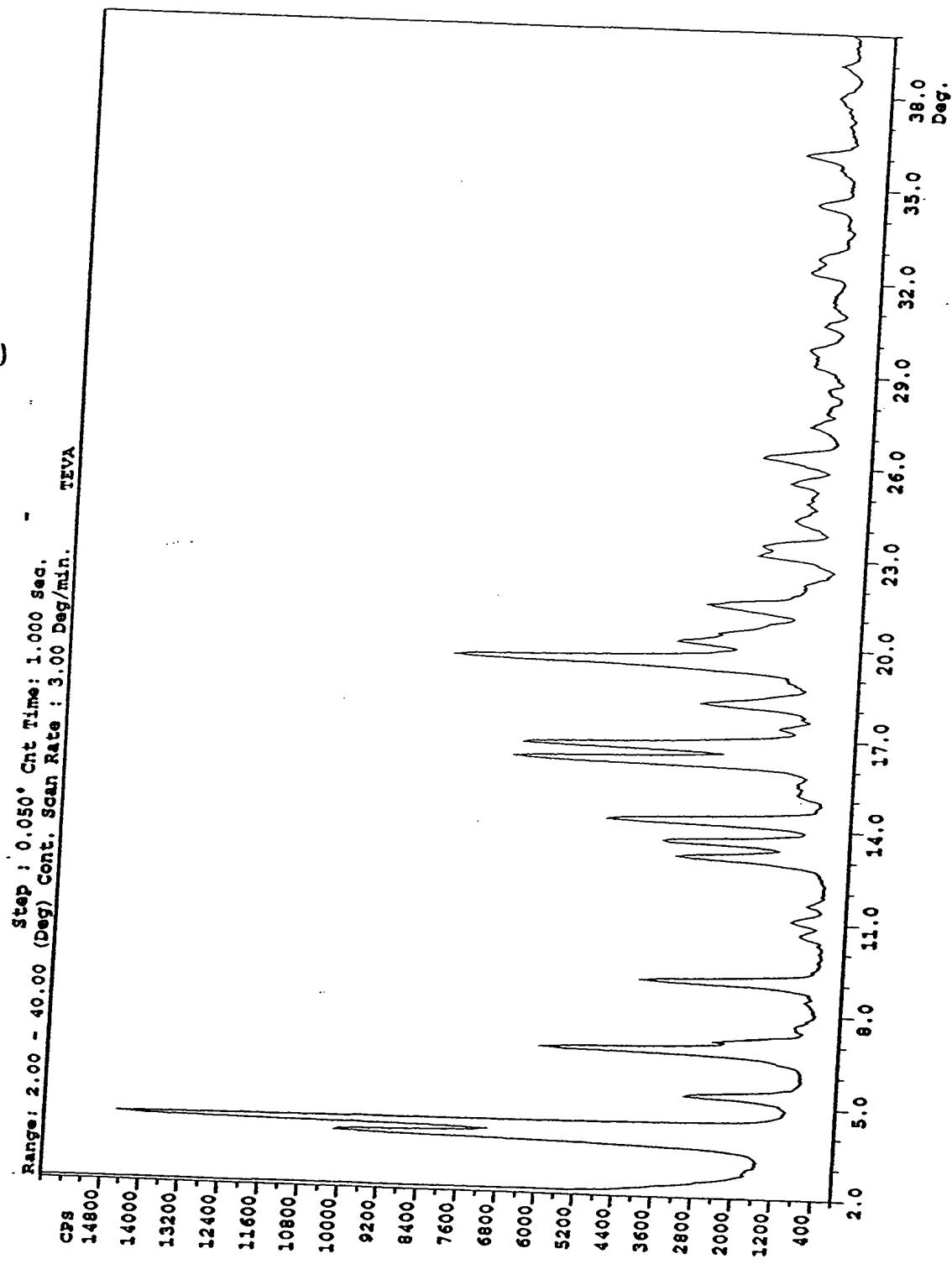


FIGURE 26

Sigma

Range: 2.00 - 40.00 (Deg) Step : 0.050° Cnt Time: 1.000 sec.
CPS Scan Rate : 3.00 Deg/min.

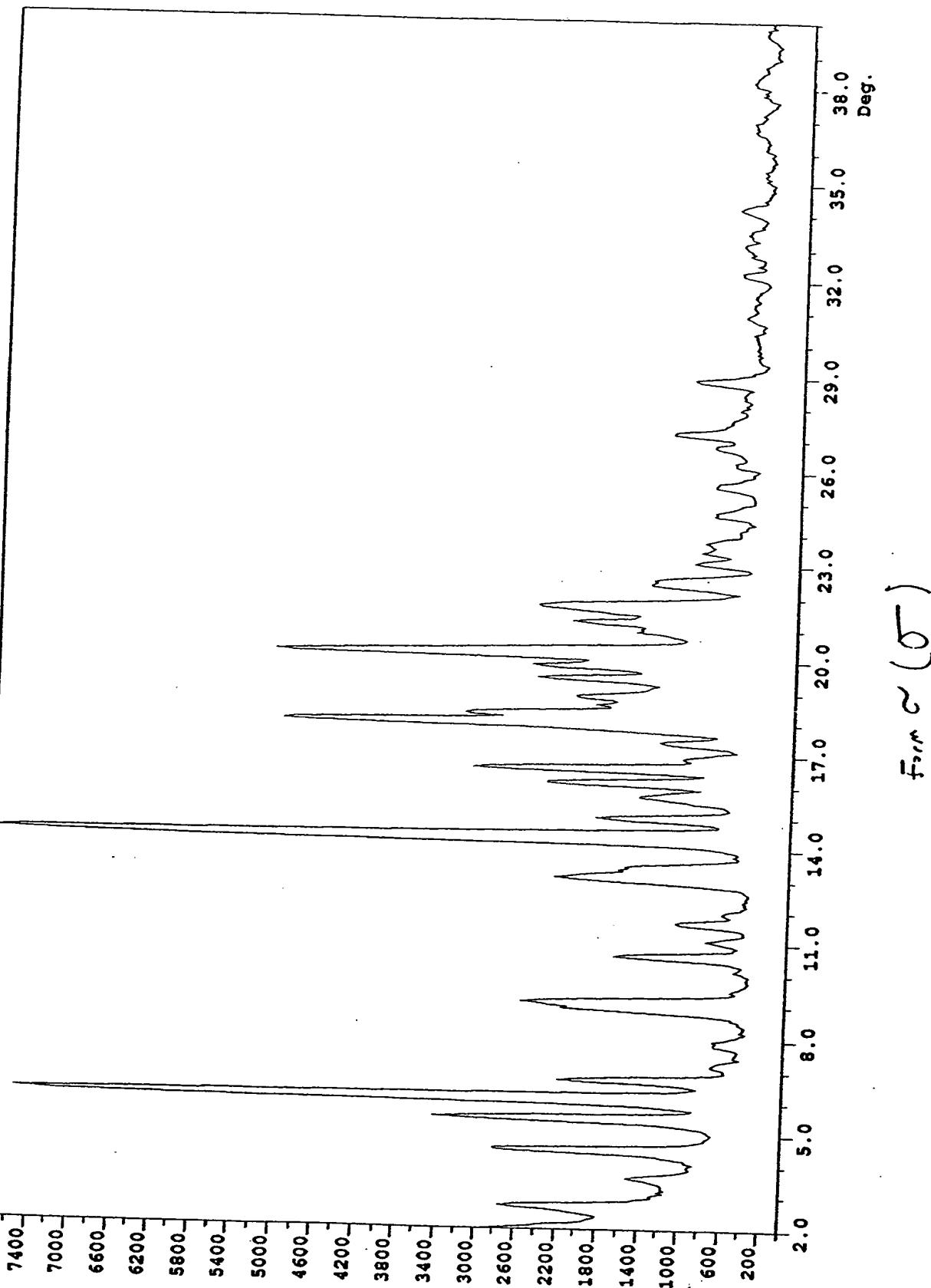


FIGURE 27

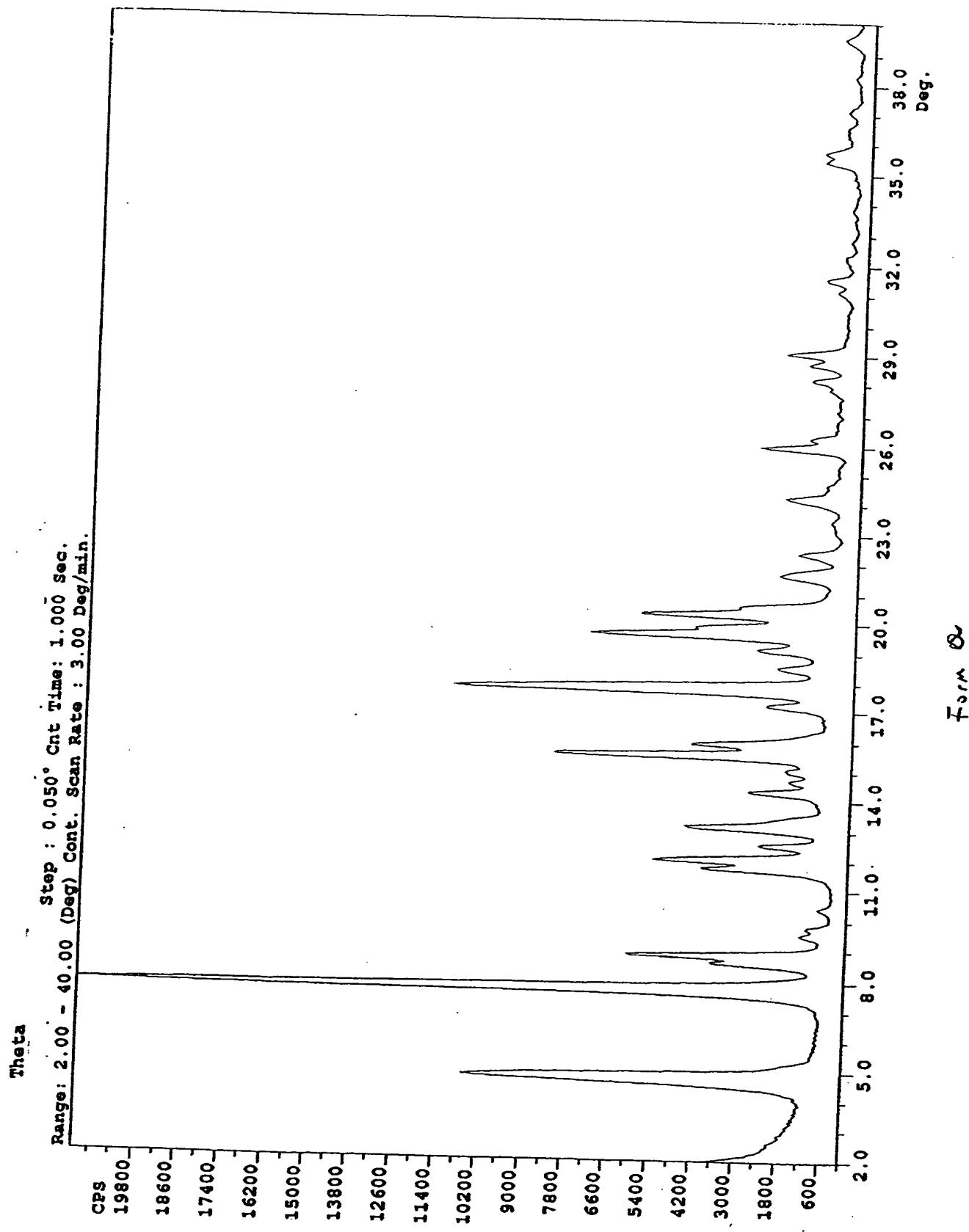
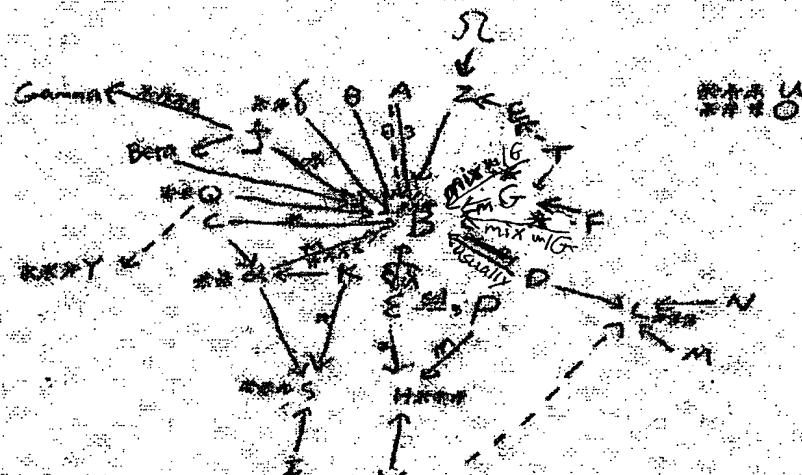


Figure 38 - Thermal stability chart



• Transformer may proceed through another term
• Normally stable at lower heating temperatures (e.g. 500°C)

220 Thermally stable forms having temperatures (in 50°C) → Transition after storage at room temperature
in mixture with starting form.

Remember when starting material contains seeds.

501 Results might vary depending on the solvate of form Epilen used.

FIGURE 29
Form L

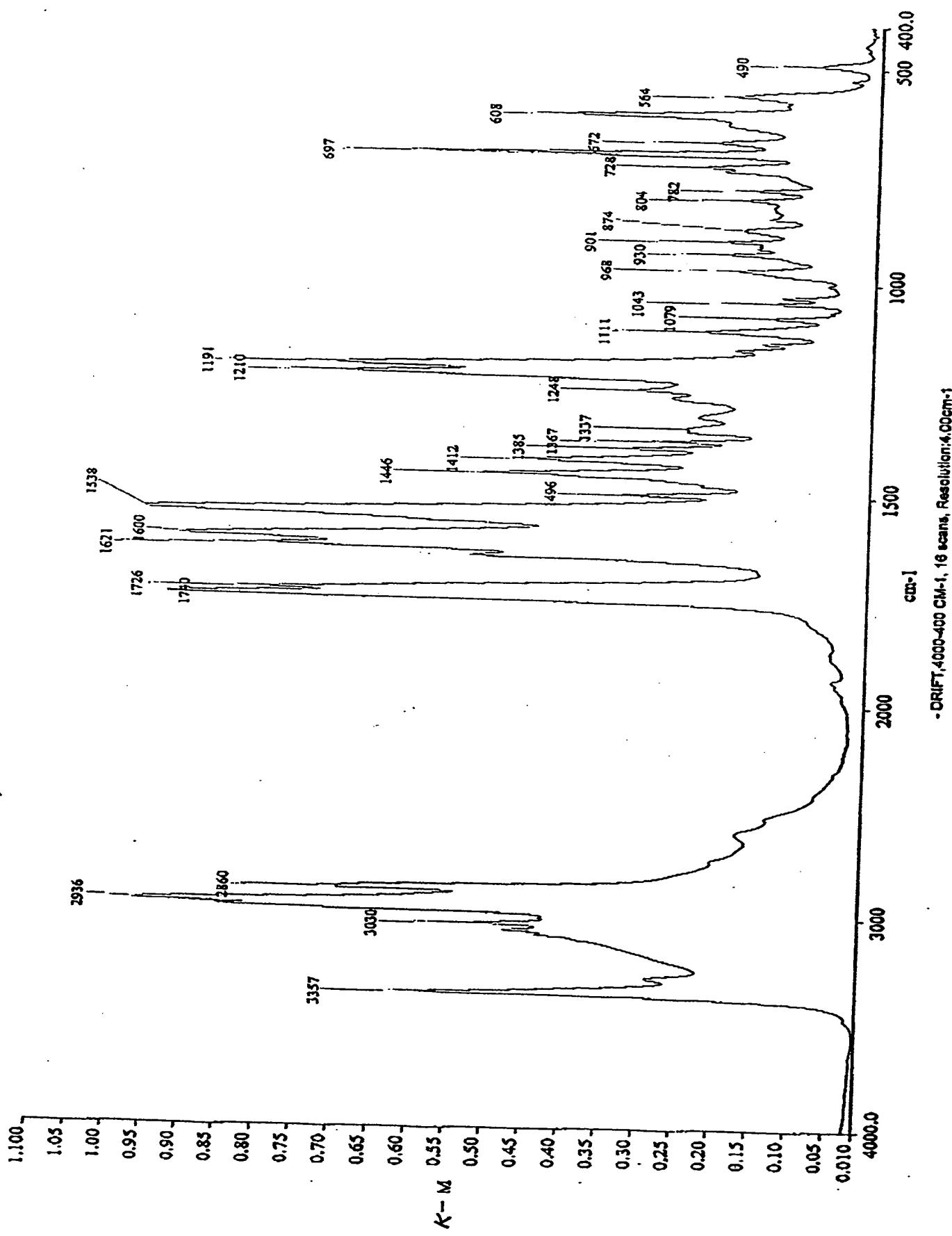


FIGURE 39
P

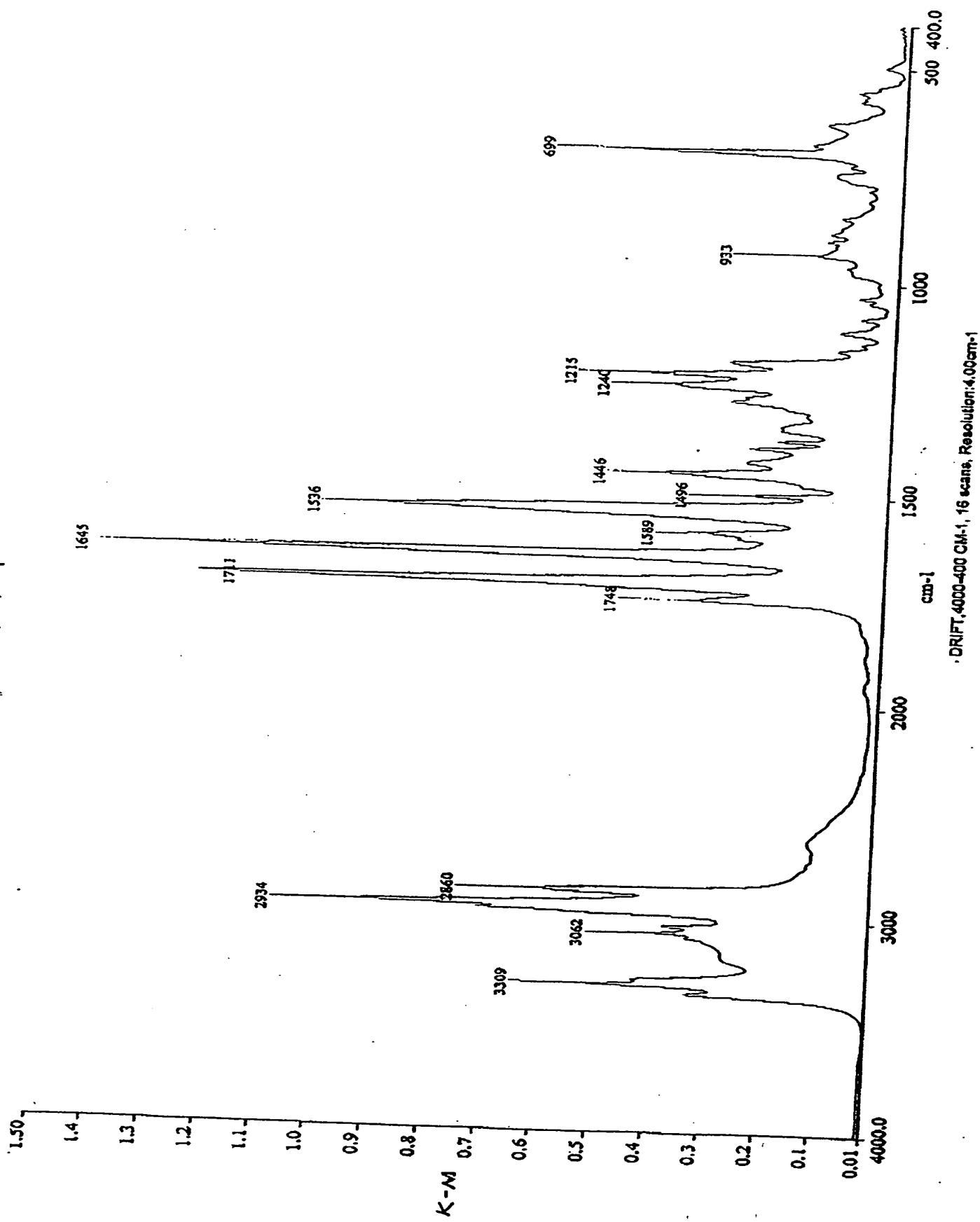


FIGURE 3Φ
F_{29.1} Q

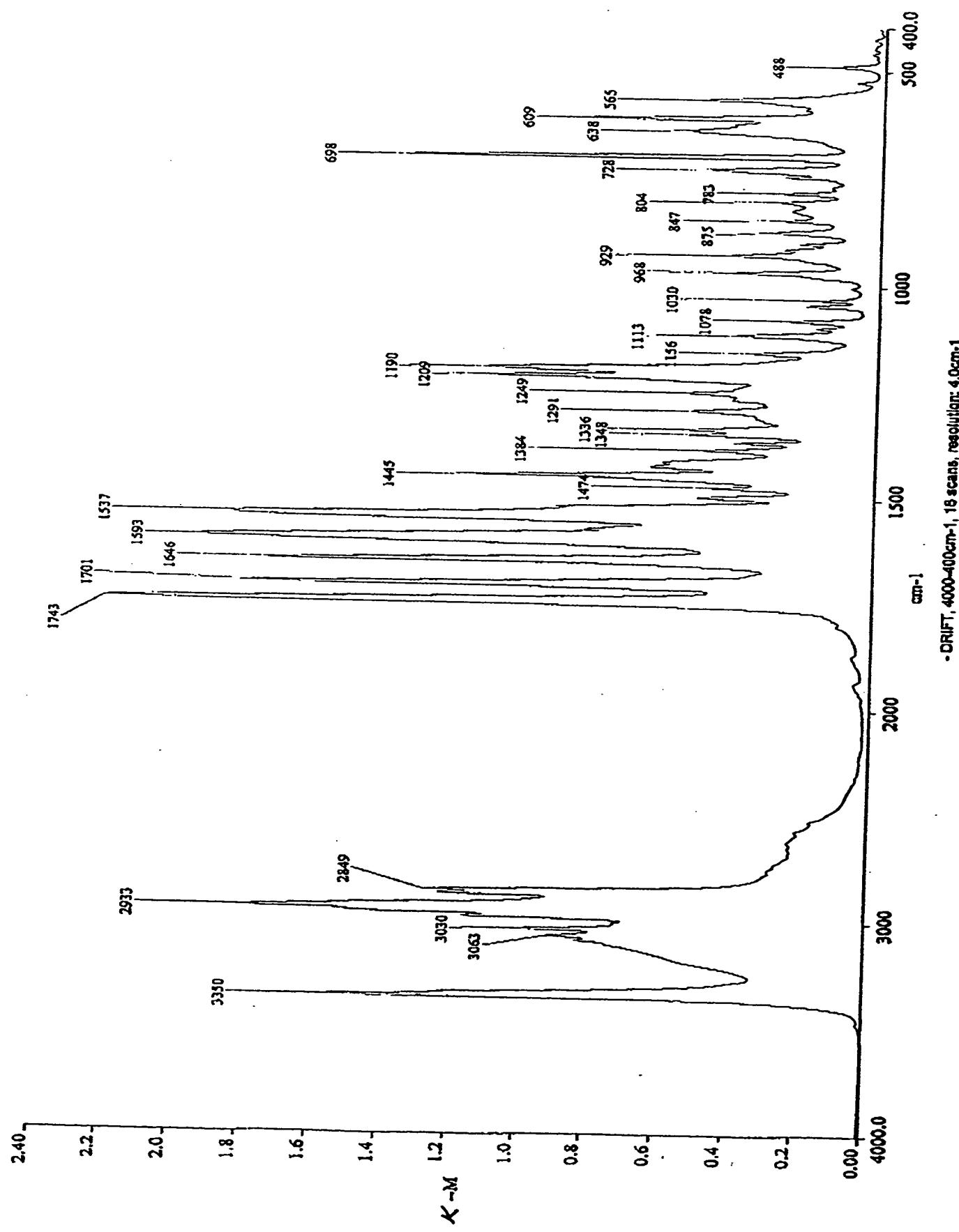


Figure 32 - *Nicotaglinide Form Z*

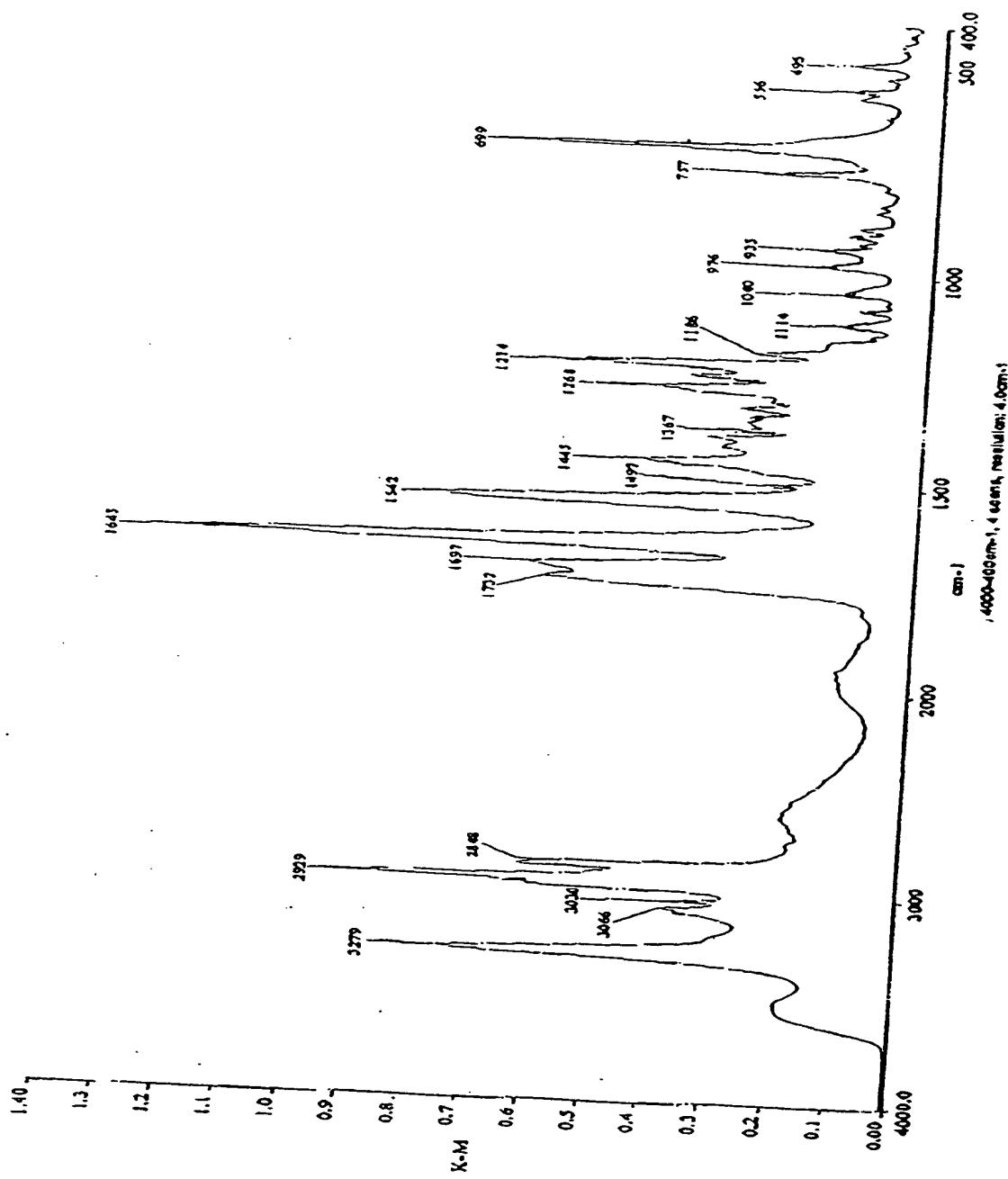


Figure E-33
Part A

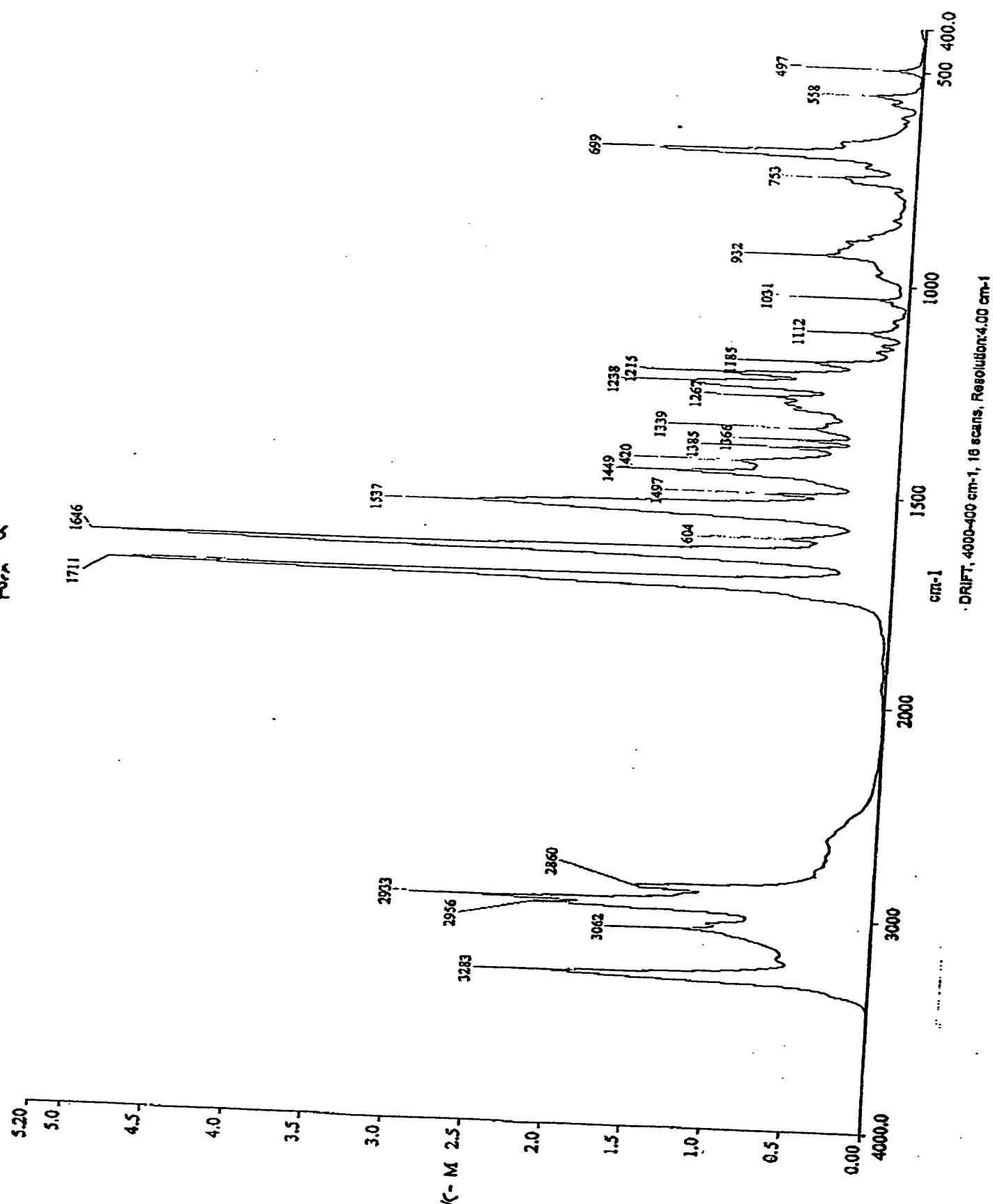


Figure 34 Fe_2O_3 ΔTA

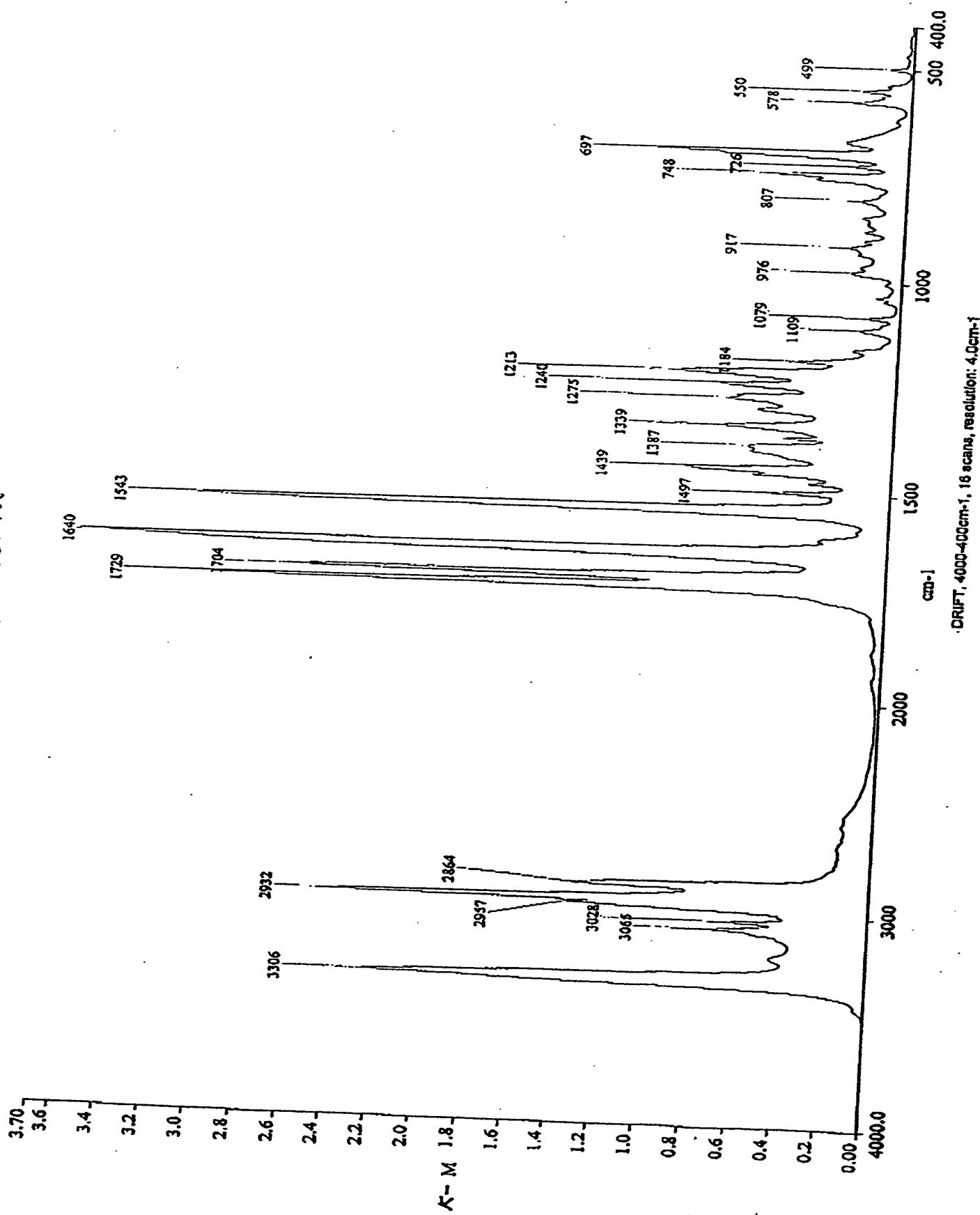


FIGURE 35 - Form 0

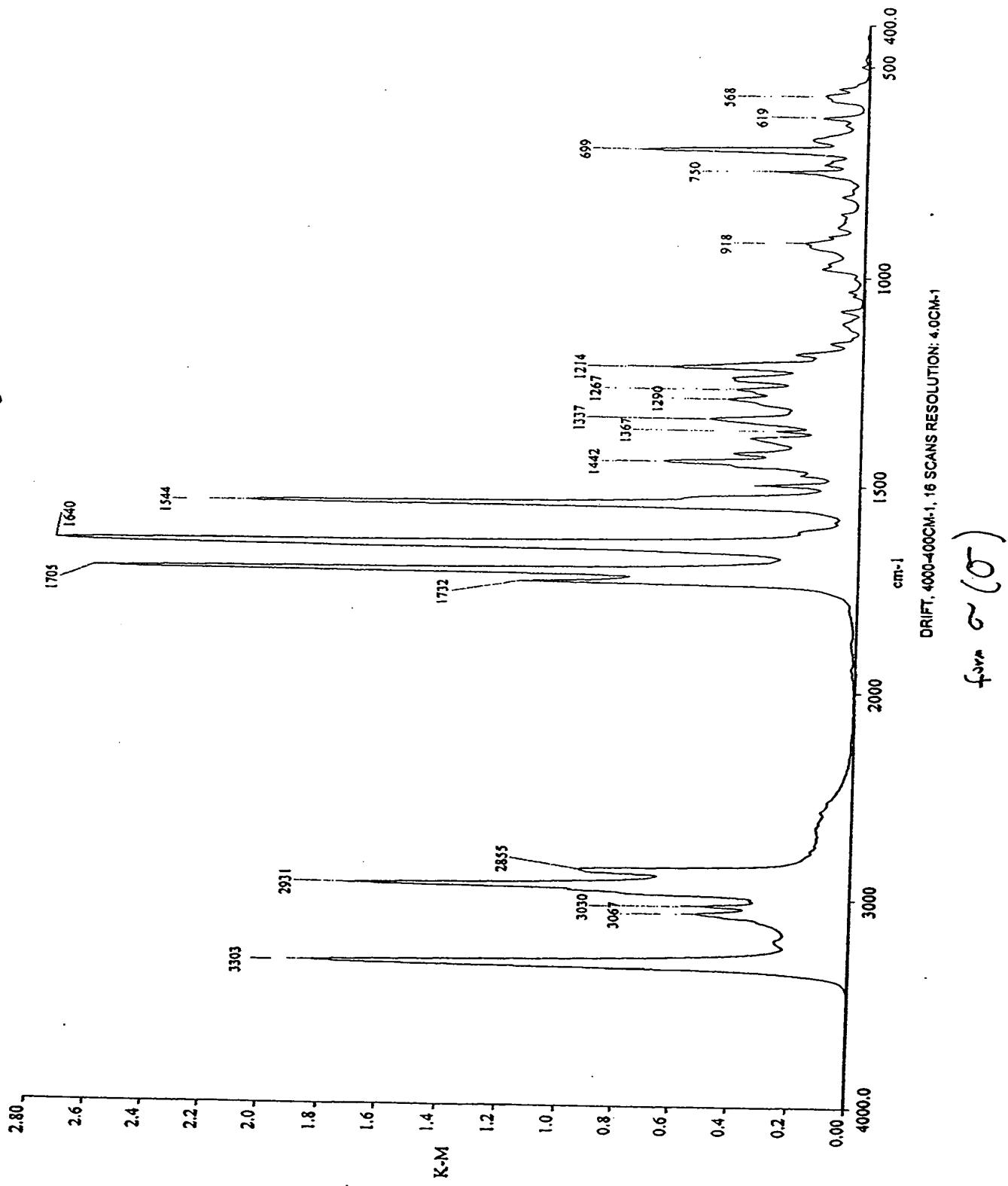


FIGURE 36 Form A

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min N2, 40.0 ml/min

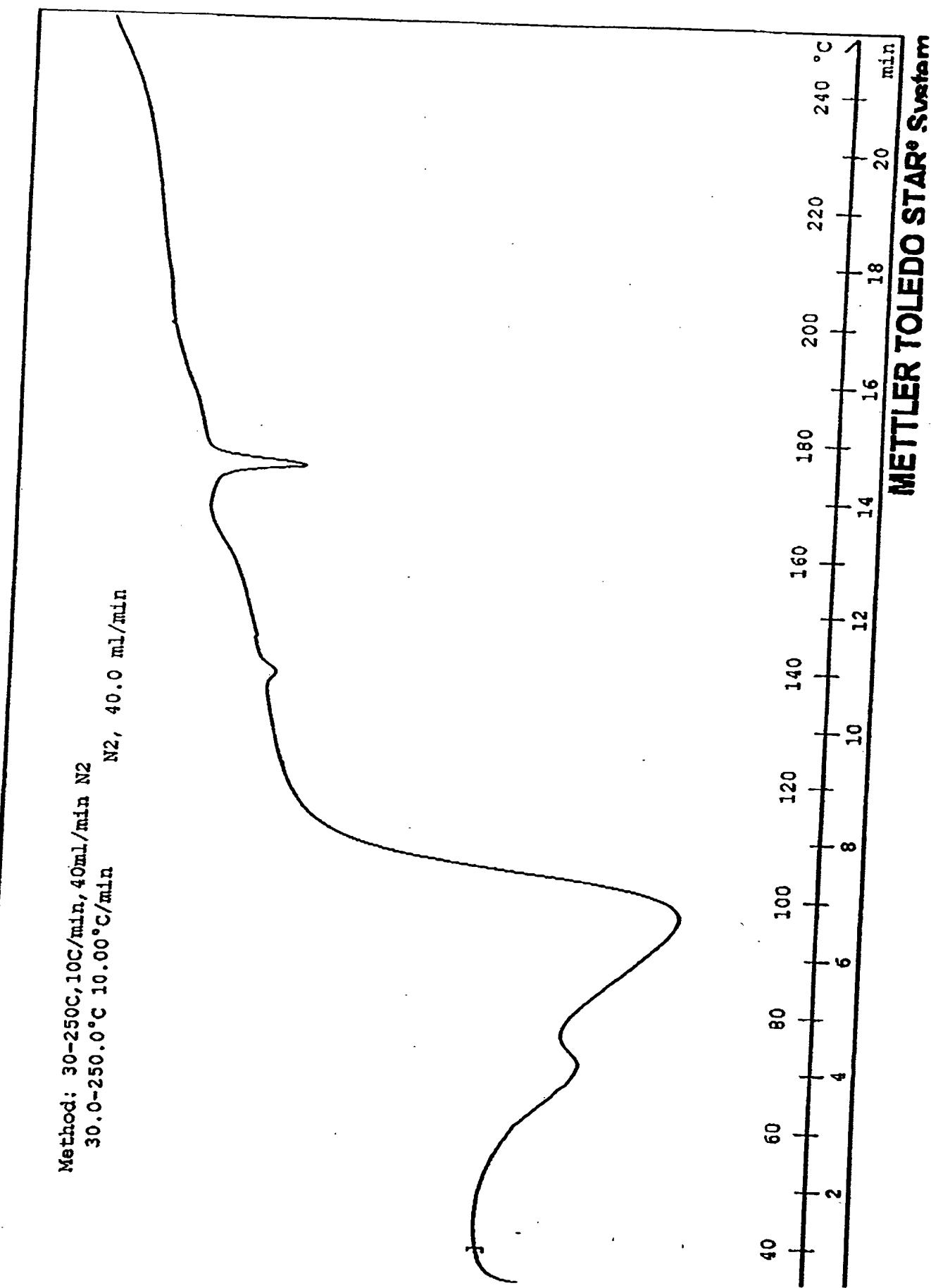


FIGURE 37 Form D

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min
N2, 40.0 ml/min

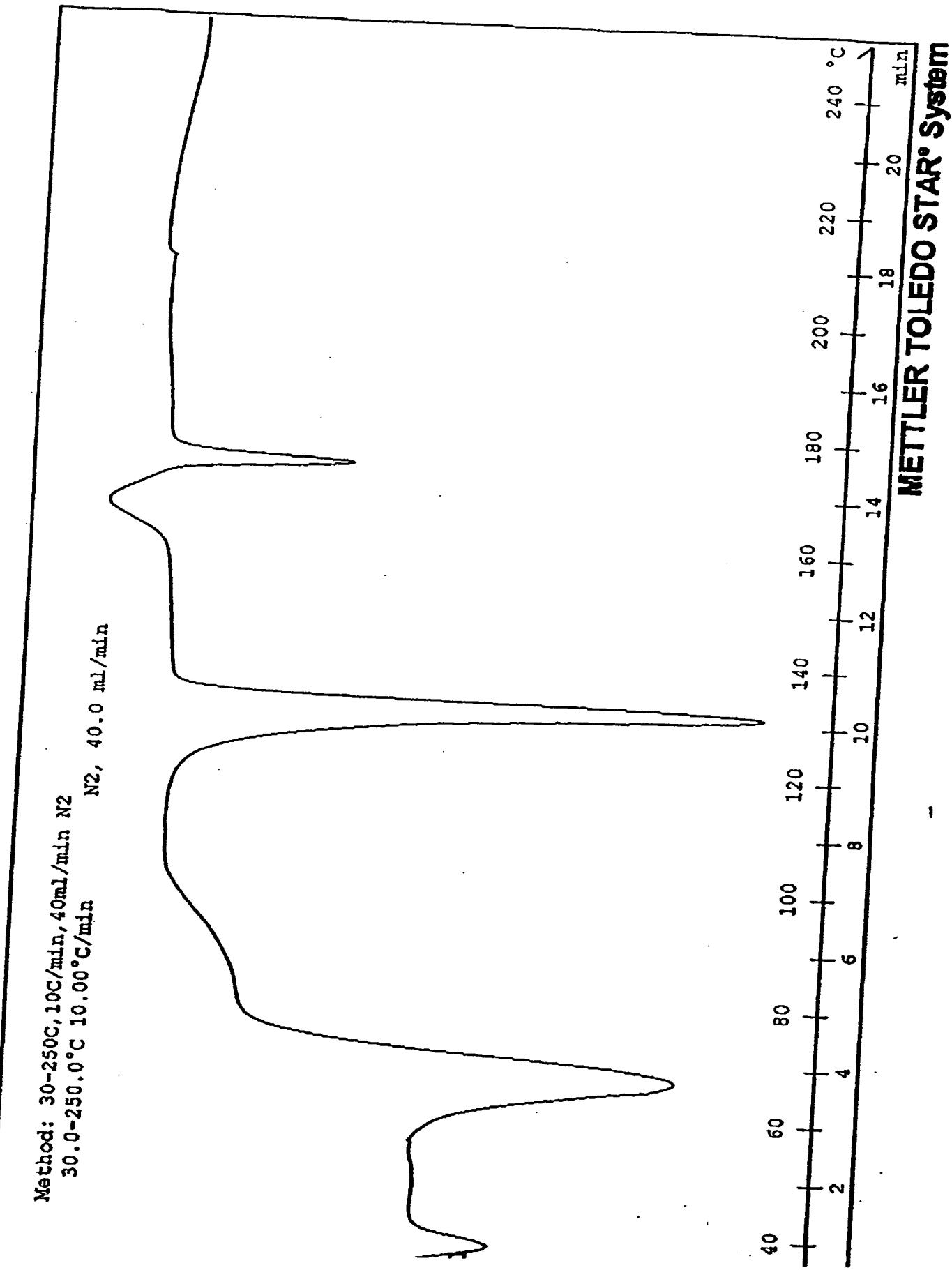
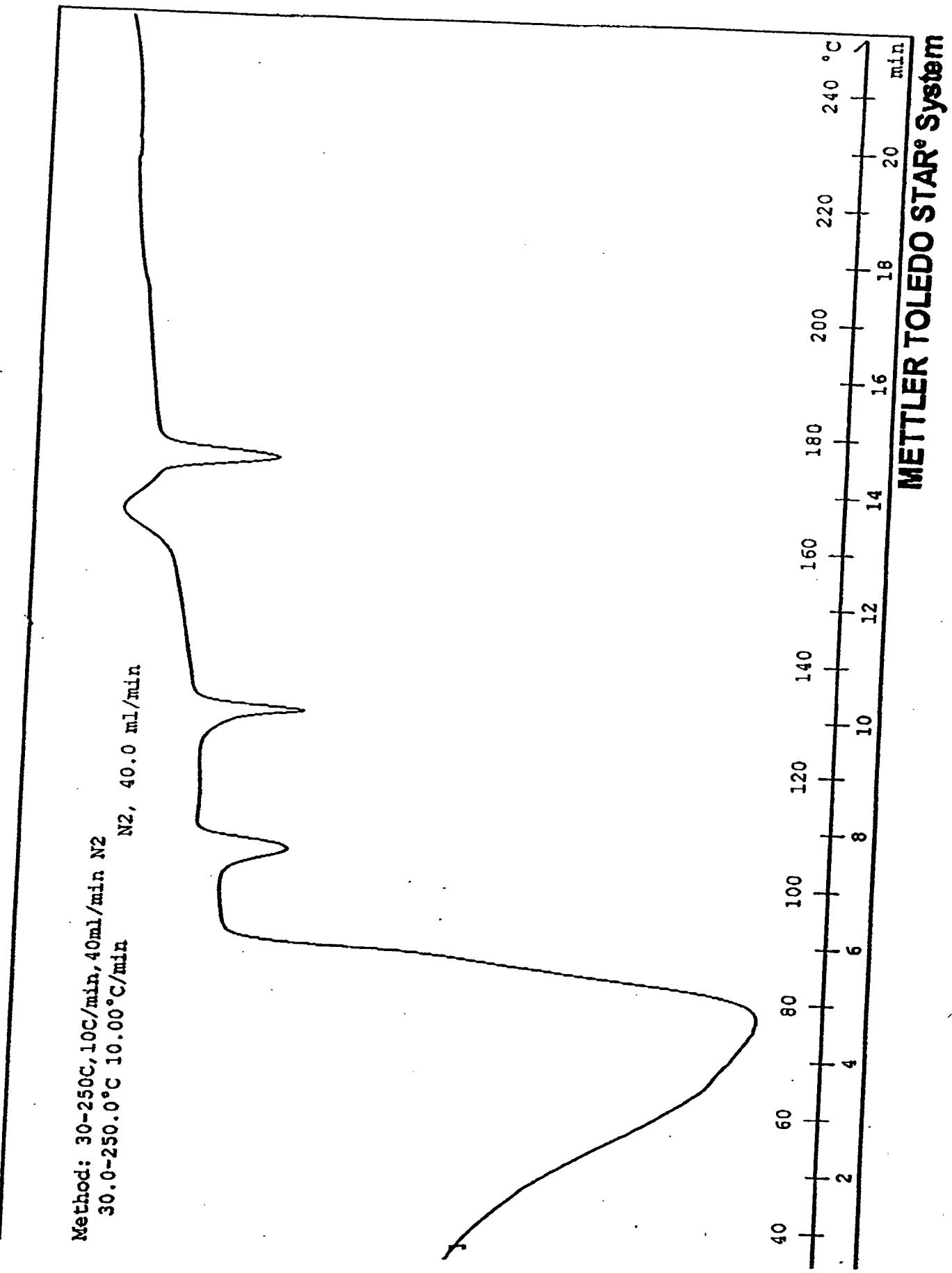


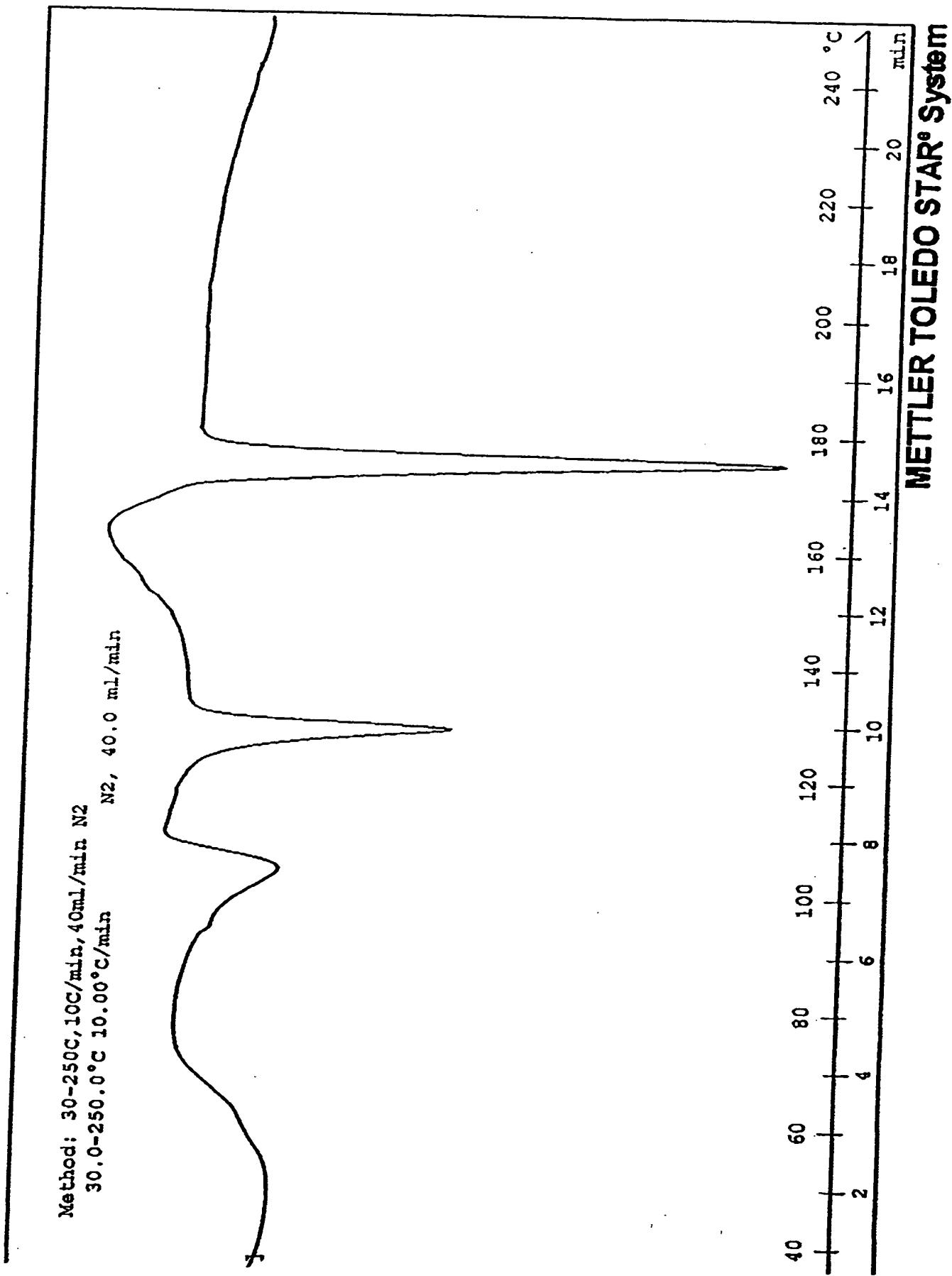
FIGURE 38

Form E

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min
N2, 40.0 ml/min



39
FIGURE 39



1

40

Method: 30-250C, 10C/min, 40ml/min N2
 30.0-250.0 °C 10.00 °C/min N2, 40.0 ml/min

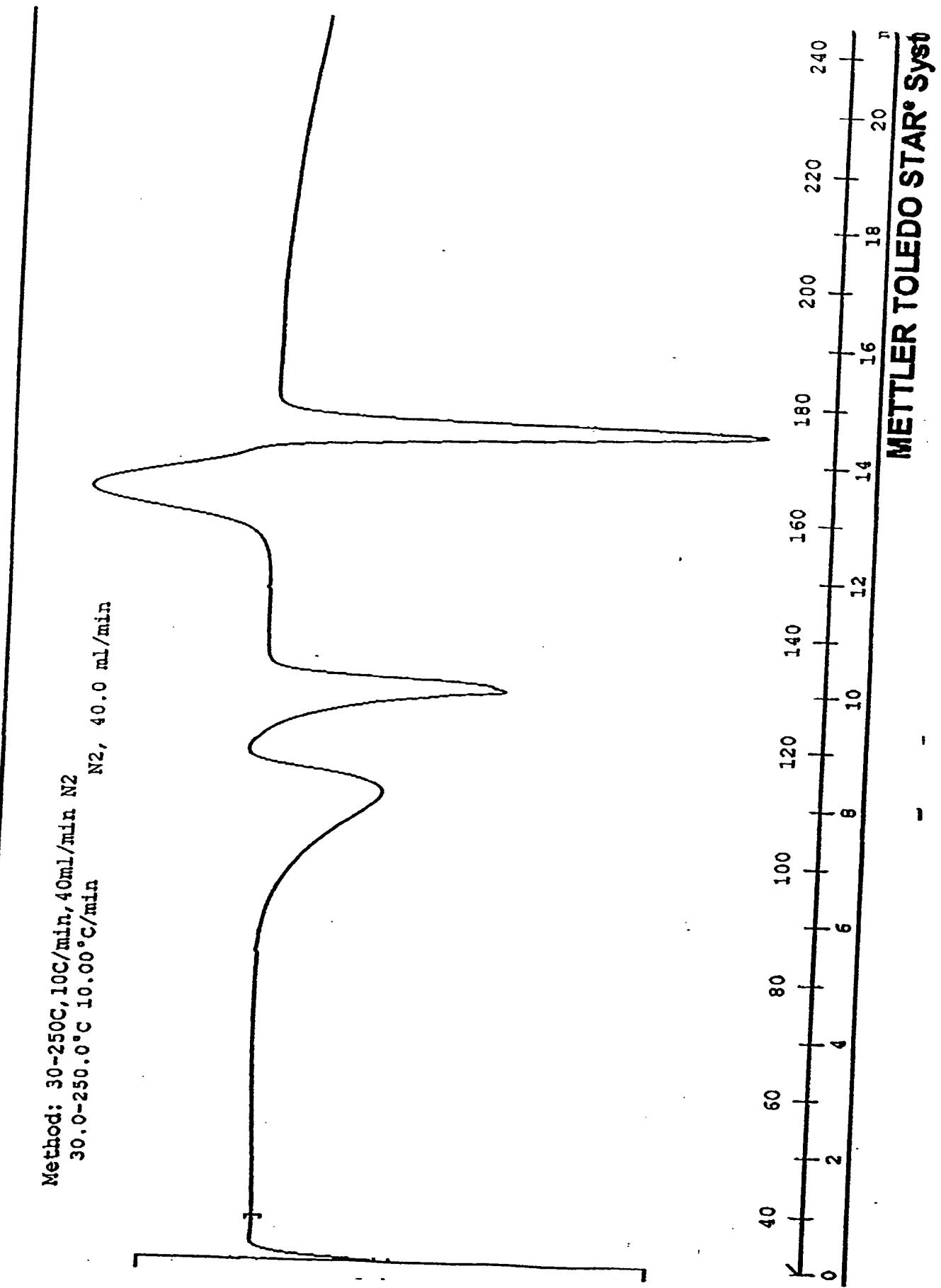


FIGURE 2941

Form I

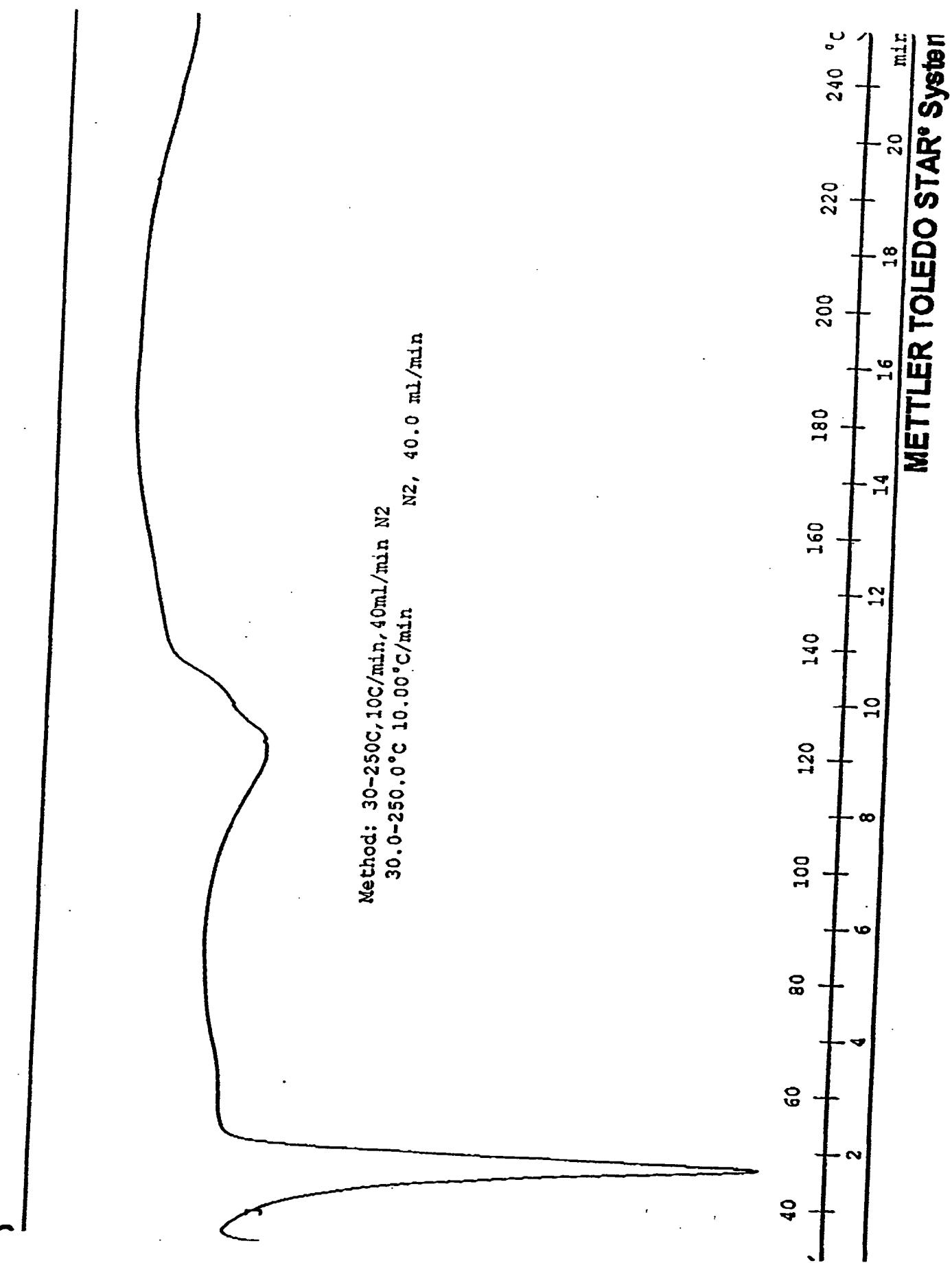


FIGURE 42
Form J

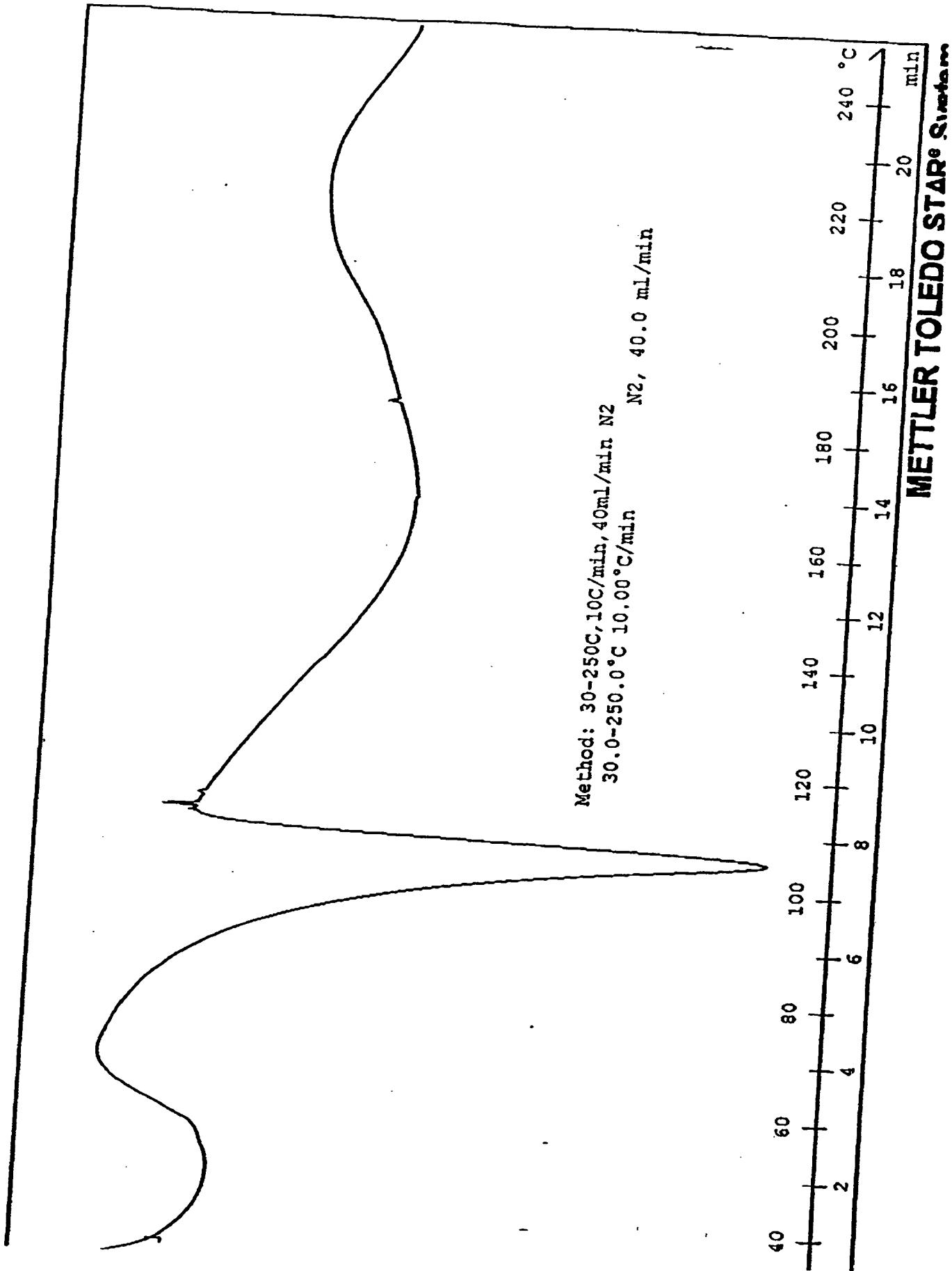


FIGURE 4/3
Form K

Method: 30-250C, 100/min, 40ml/min N2
30.0-250.0°C 10.00°C/min
N2, 40.0 ml/min

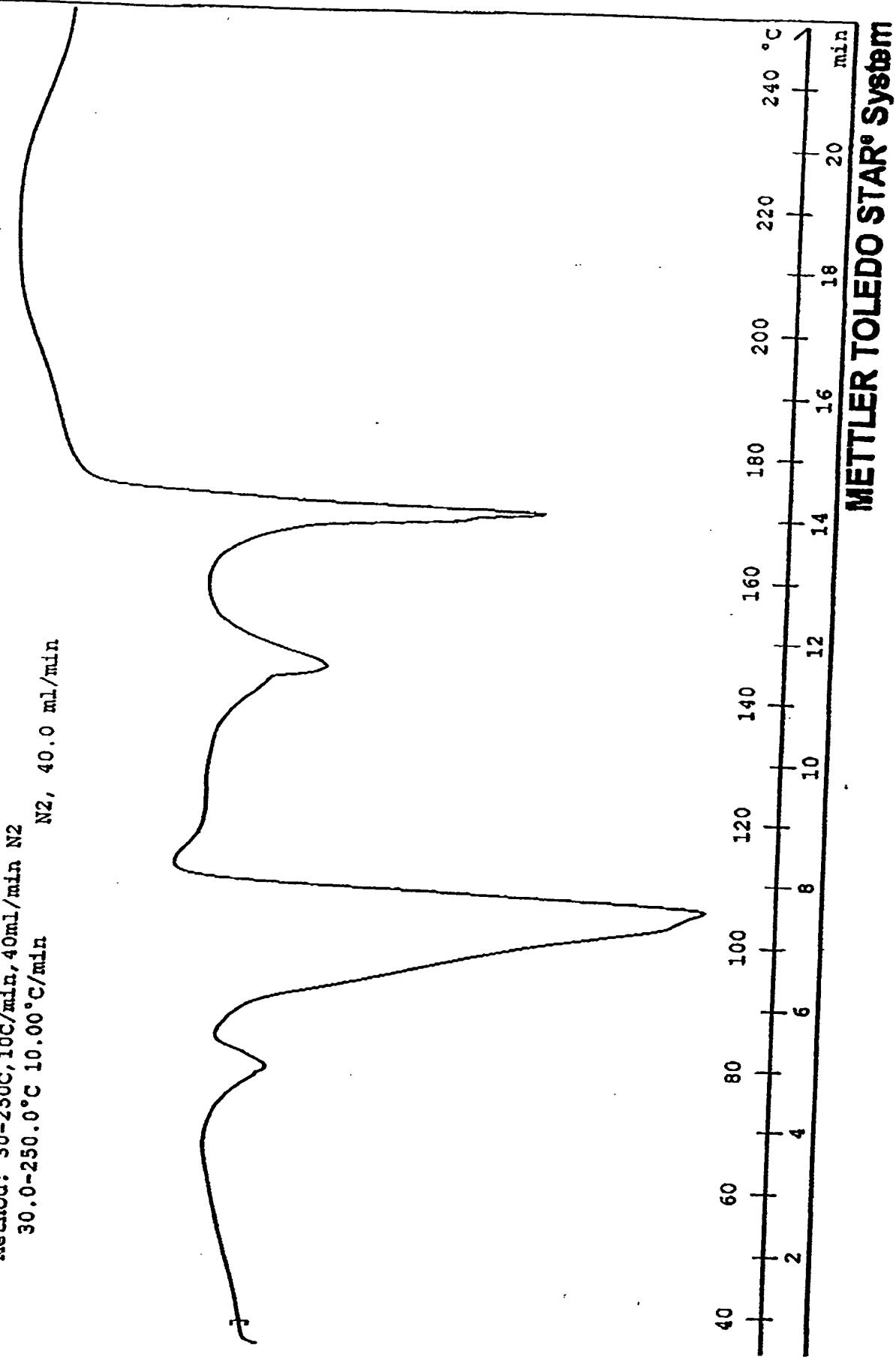


FIGURE 42 4/4
Form L

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min N2, 40.0 ml/min

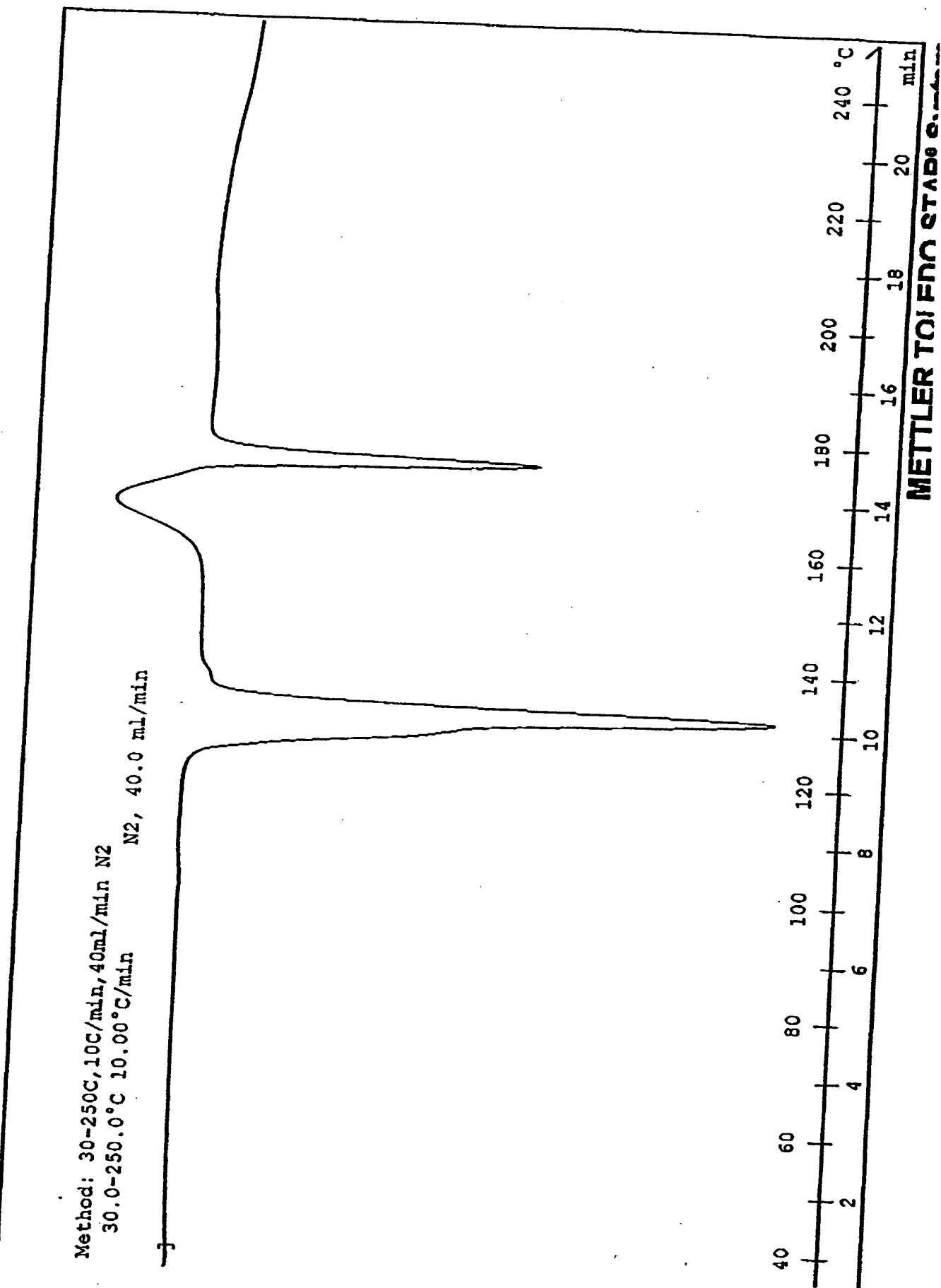


Figure 45
Form M

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min N2, 40.0 ml/min

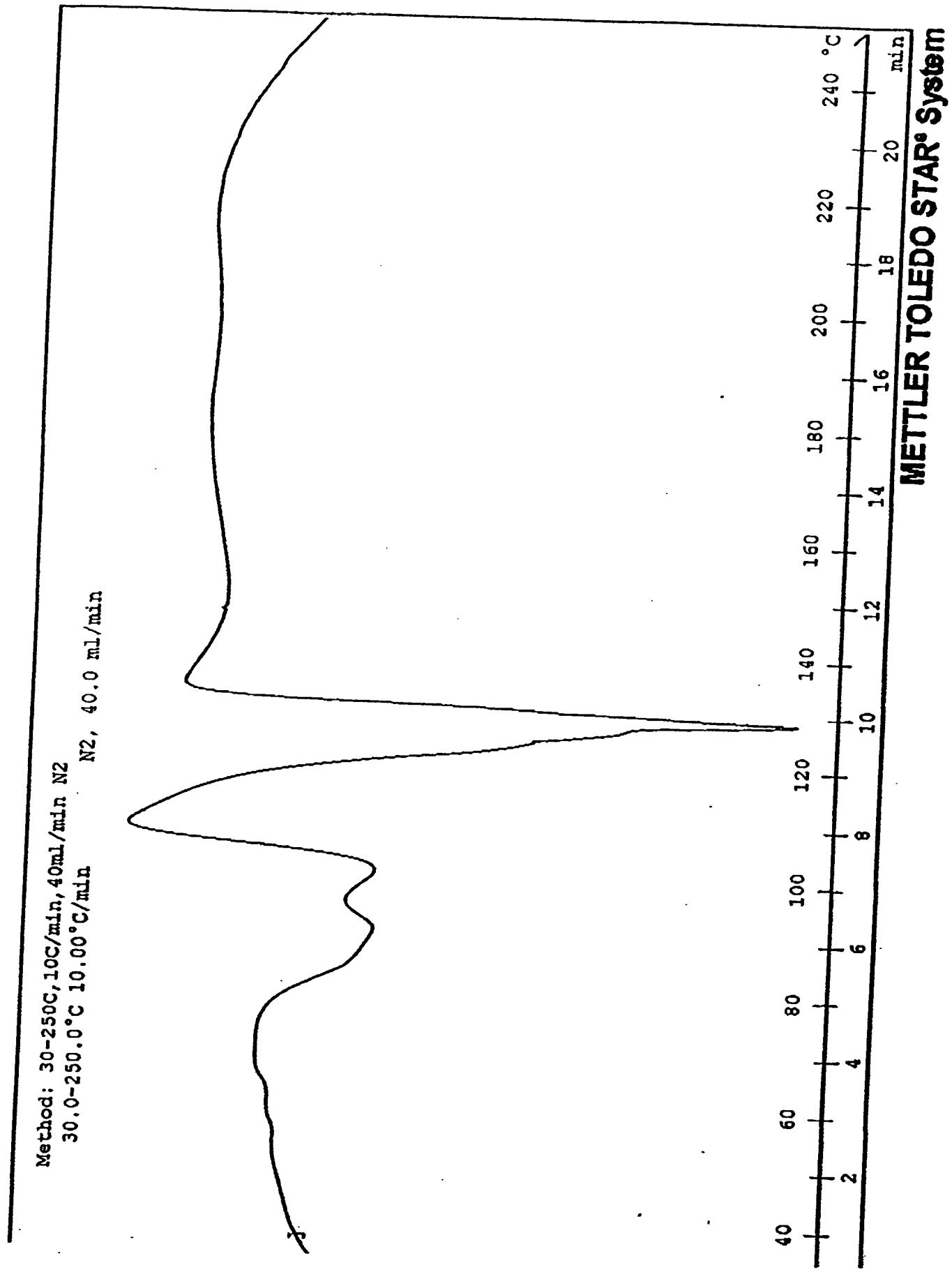
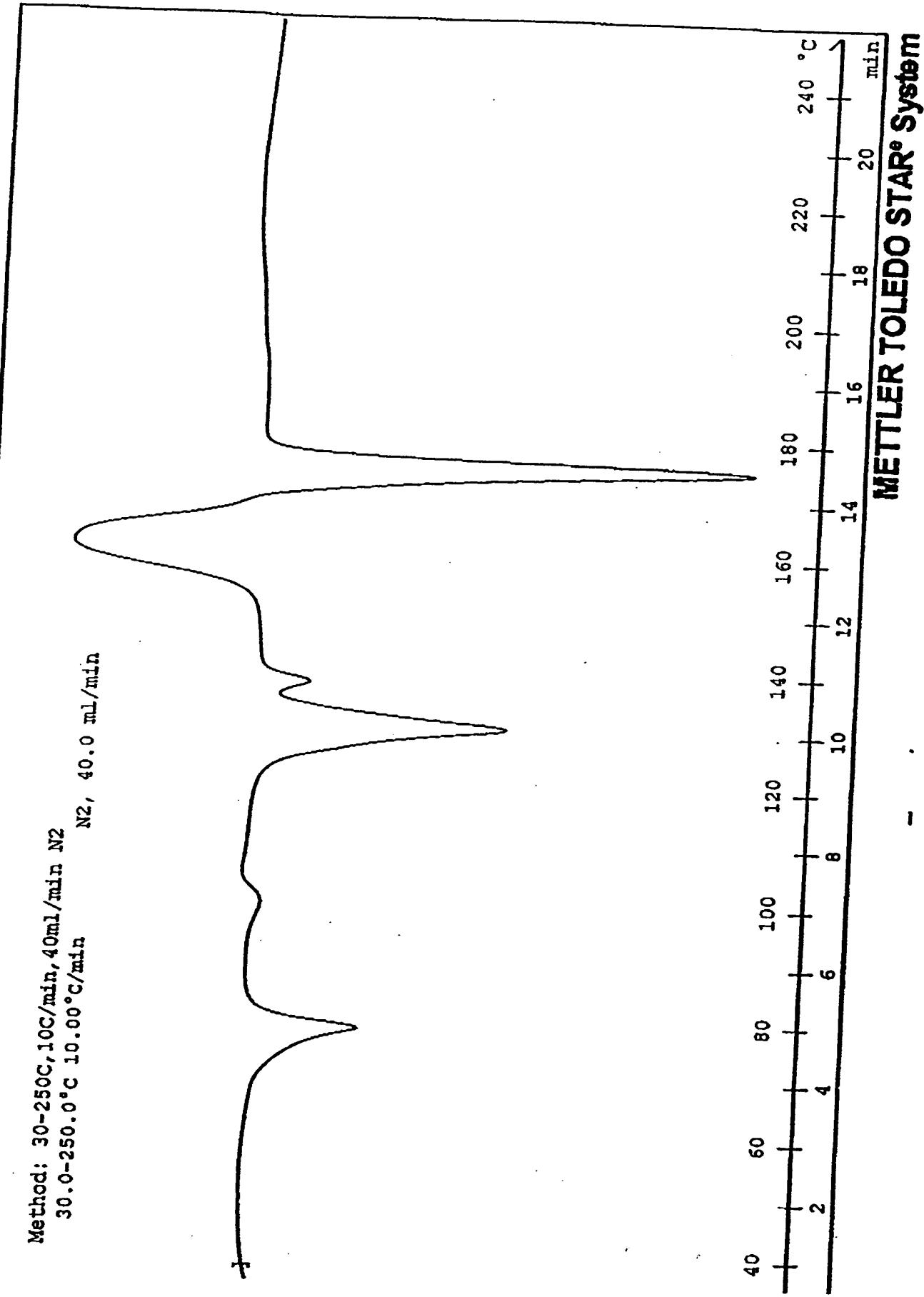


FIGURE 46
Form N

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min
N2, 40.0 ml/min



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FIGURE #5 4/7

Form G

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0 °C 10.00°C/min
N2, 40.0 ml/min

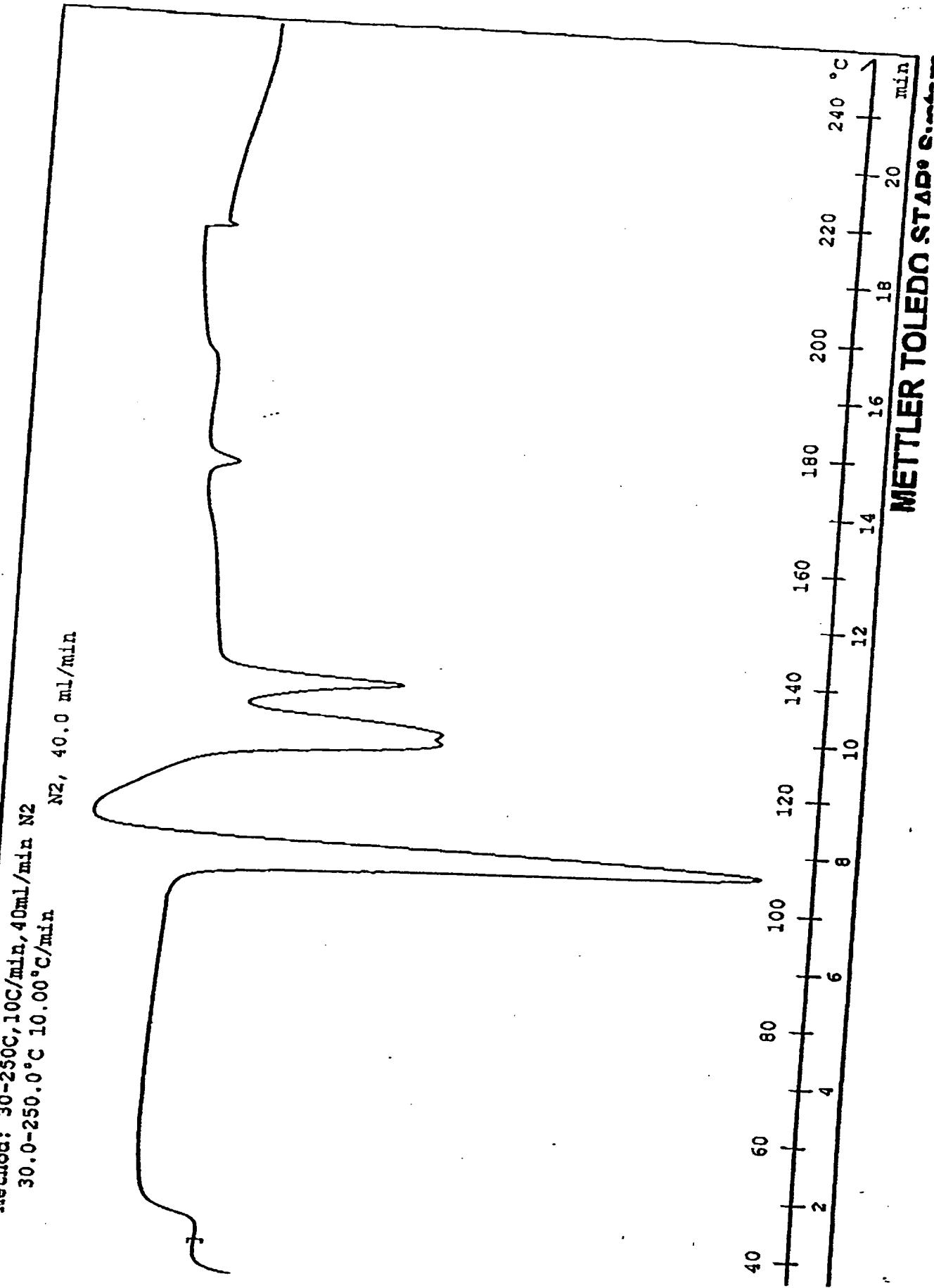


Figure 48
Form 1

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min
N2, 40.0 ml/min

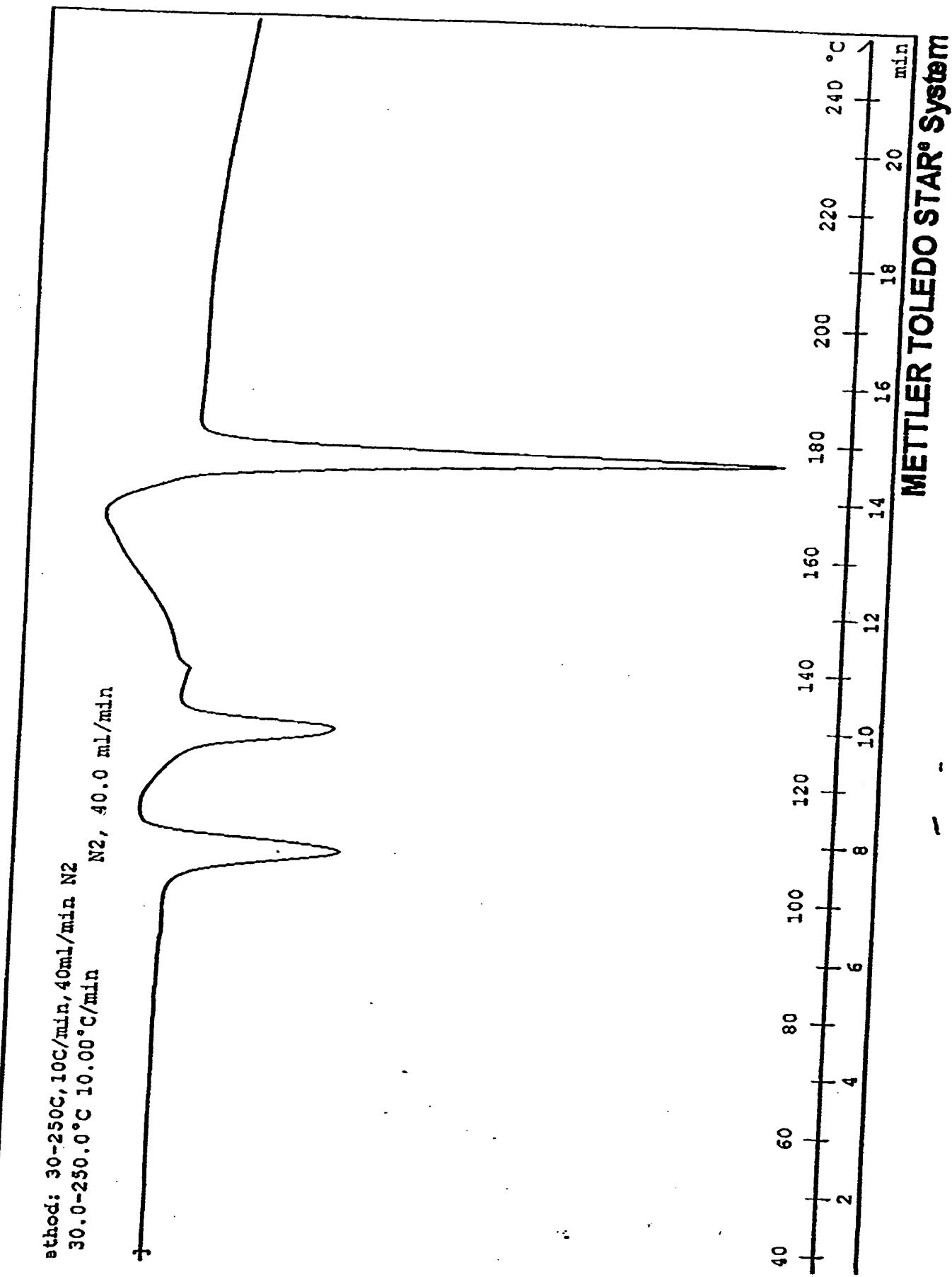


FIGURE 47 40
Form Q

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min N2, 40.0 ml/min

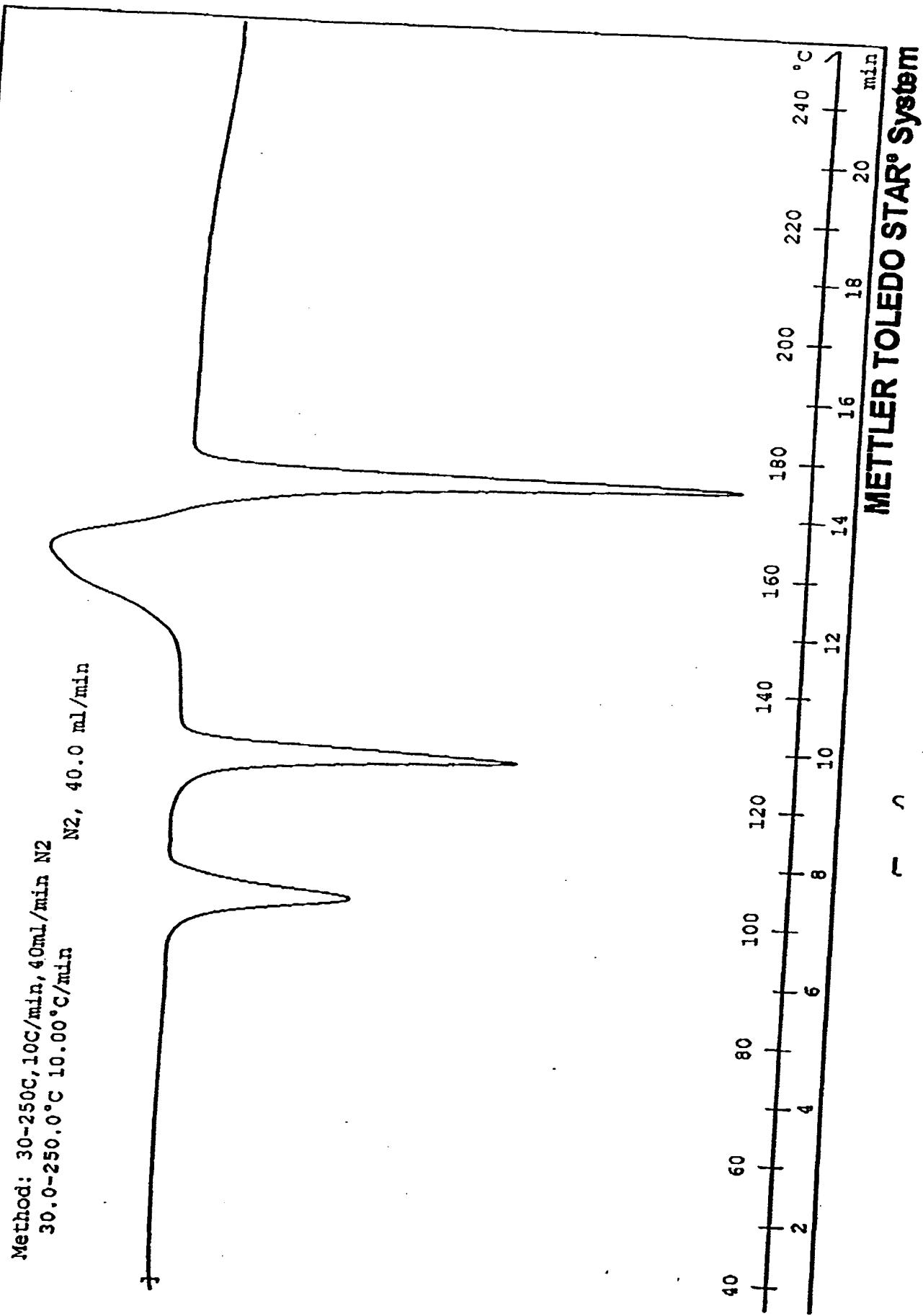


FIGURE 48-50
Form T

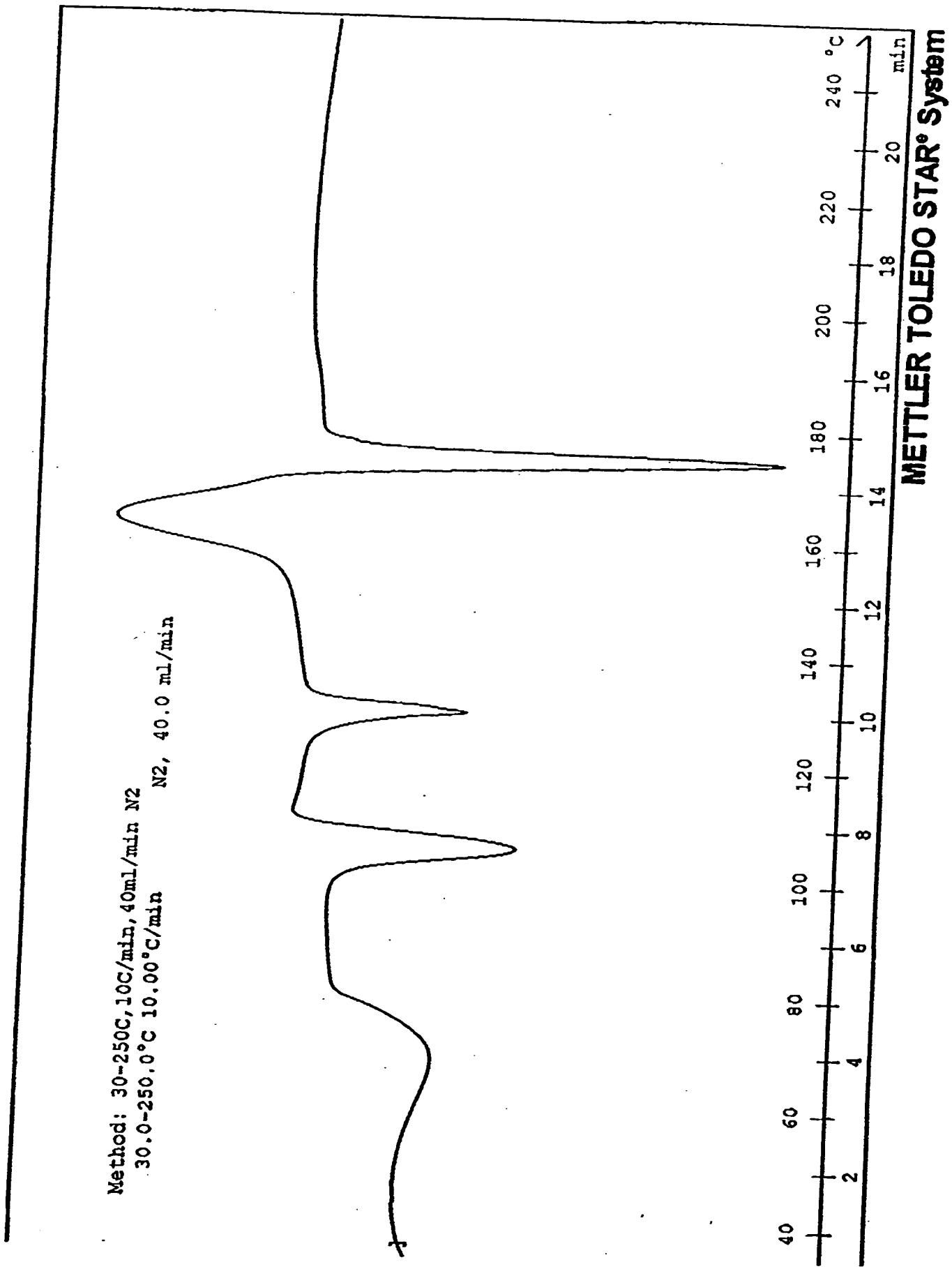


FIGURE #51

Form I λ

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min
N2, 40.0 ml/min

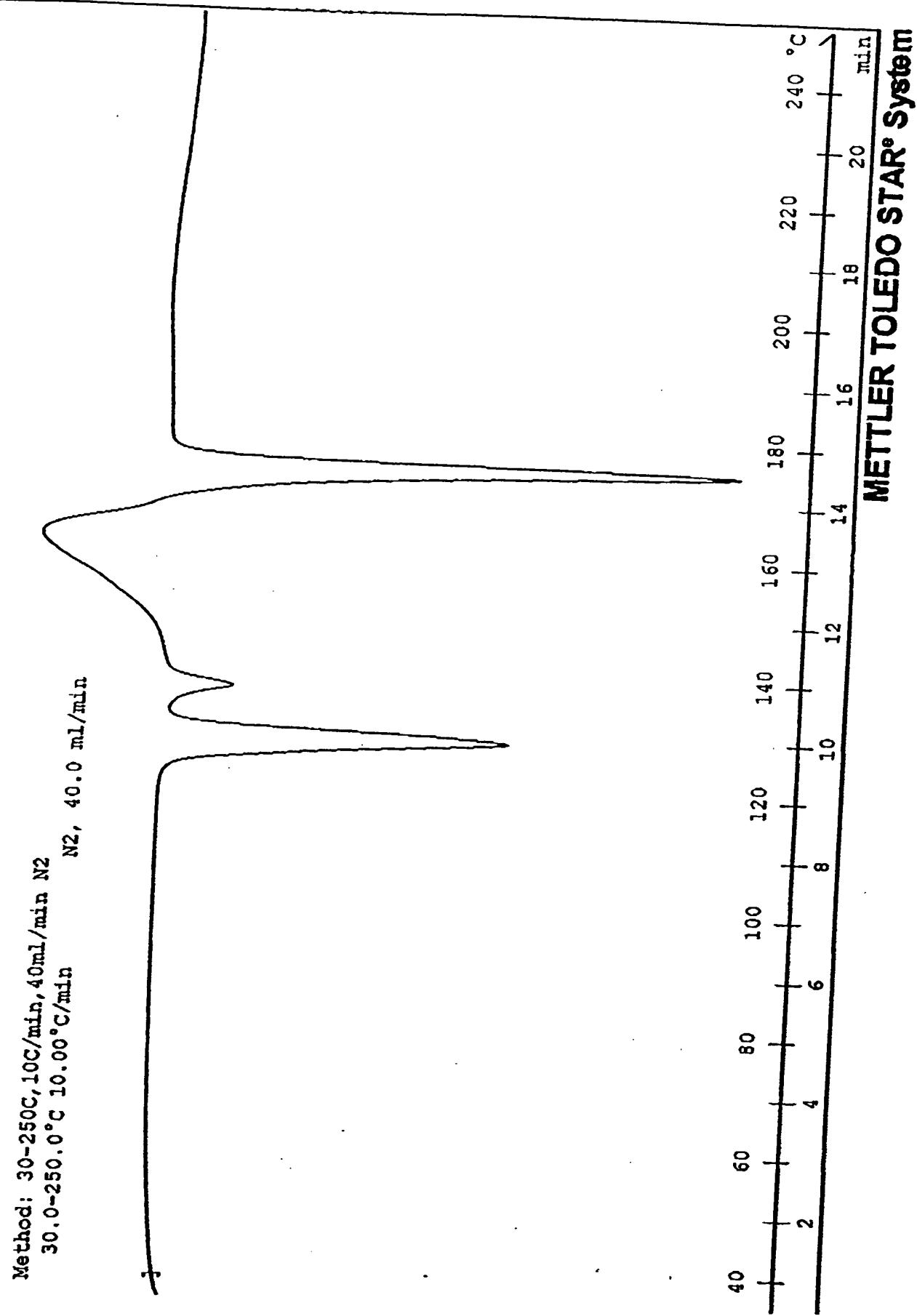


FIGURE 550
Form V

Method: 30-250C, 10C/min, 40mL/min N2
30.0-250.0°C 10.00°C/min
N2, 40.0 mL/min

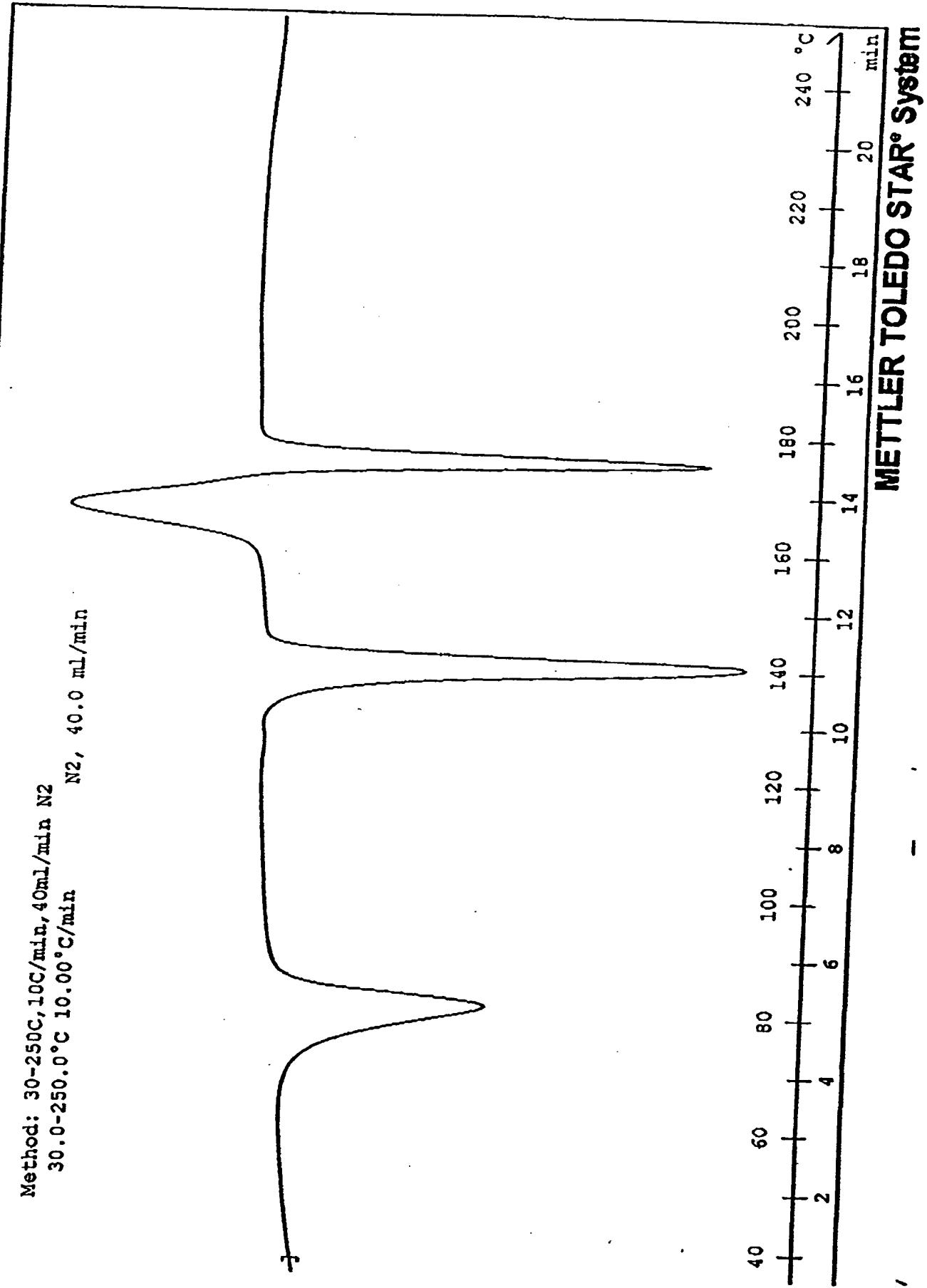


FIGURE 55-53

Form Y (chloroform solvent)

Method: 30-250°C, 100°C/min, 40mL/min N₂
30.0-250.0°C 10.00 °C/min N₂, 40.0 mL/min

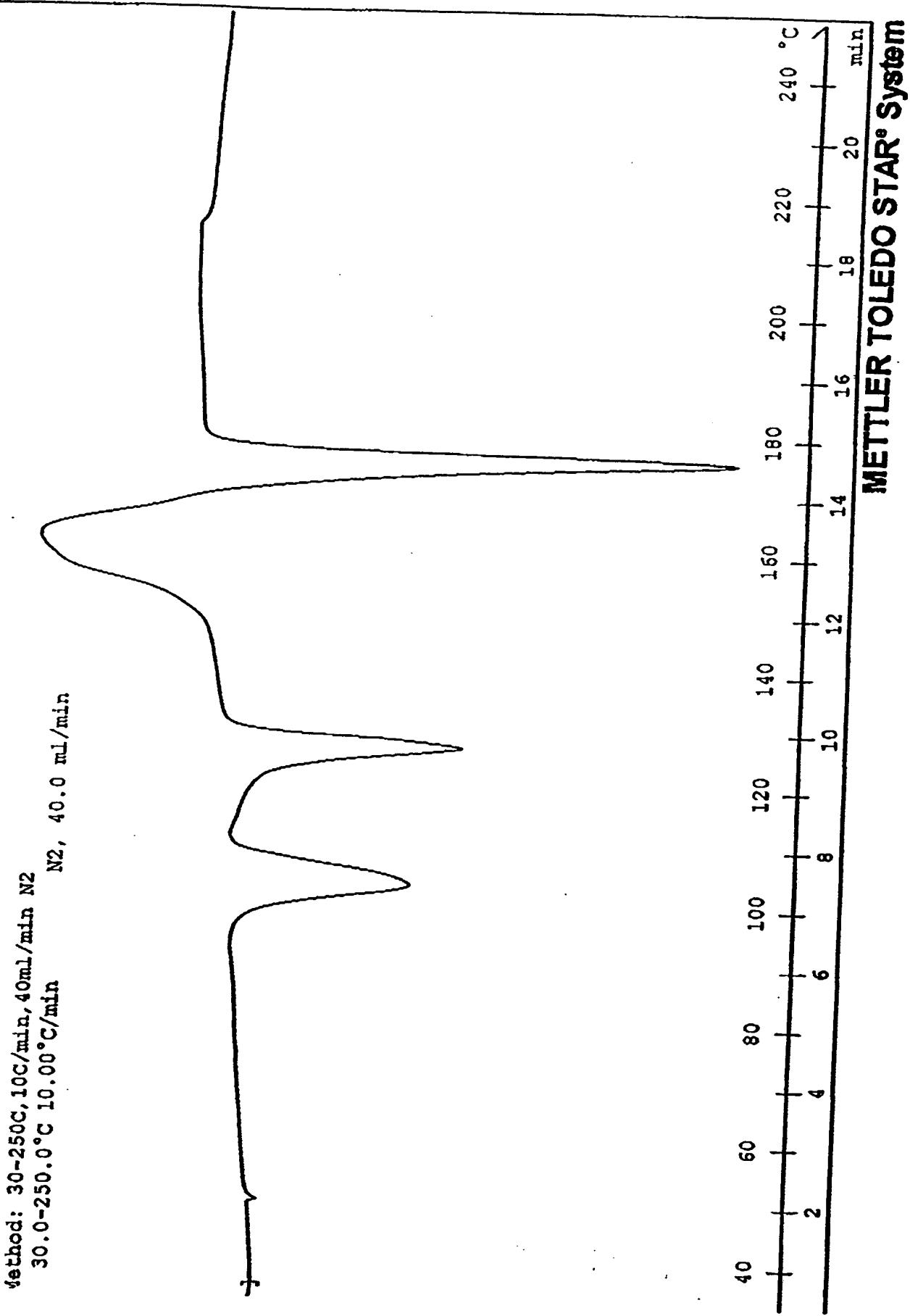
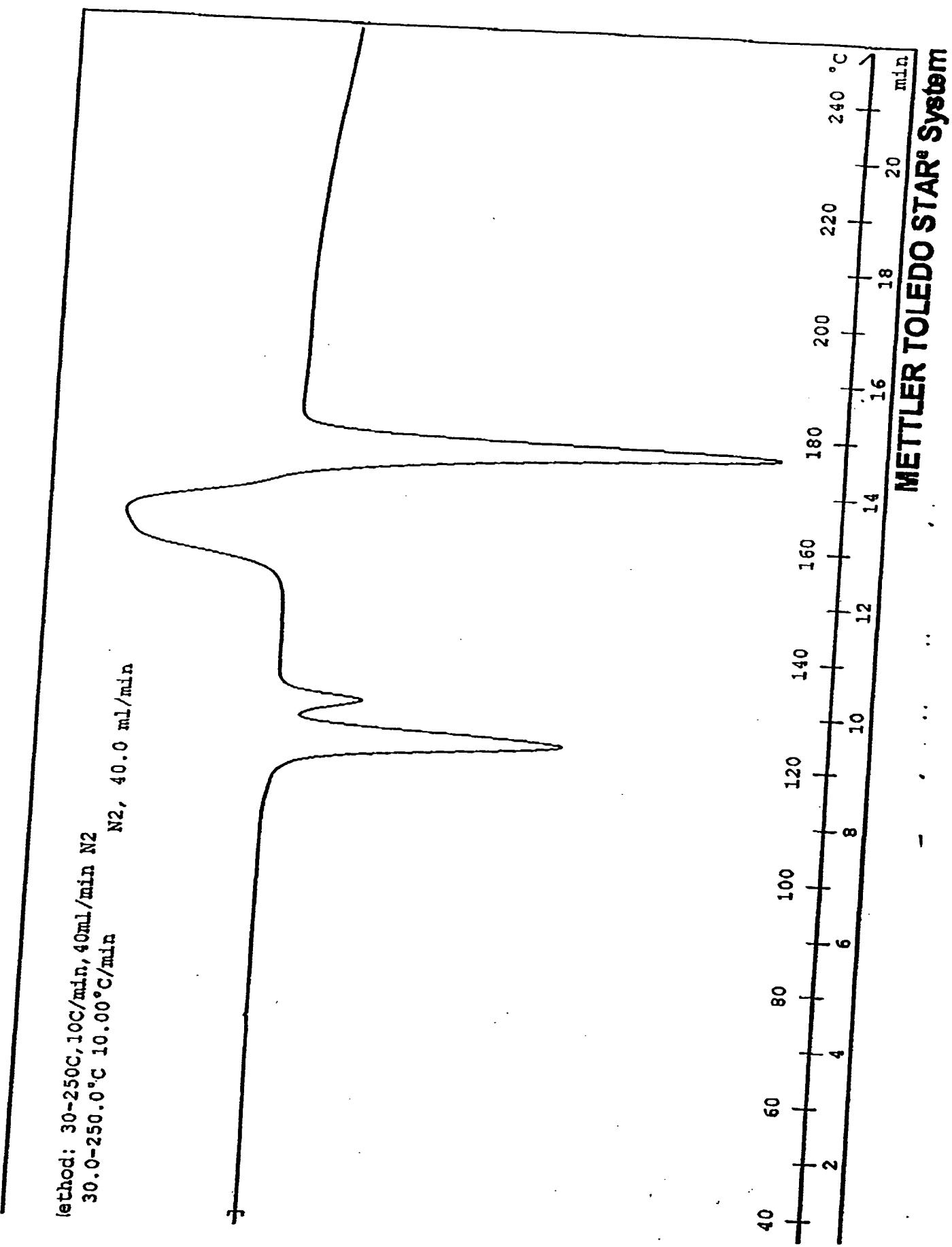


Figure 5 4/
Y (dichromethane solvent)

Method: 30-250C, 10C/min, 40mL/min N2
30.0-250.0°C 10.00°C/min N2, 40.0 mL/min



55

Figure 27 - Natrolinide Form Z

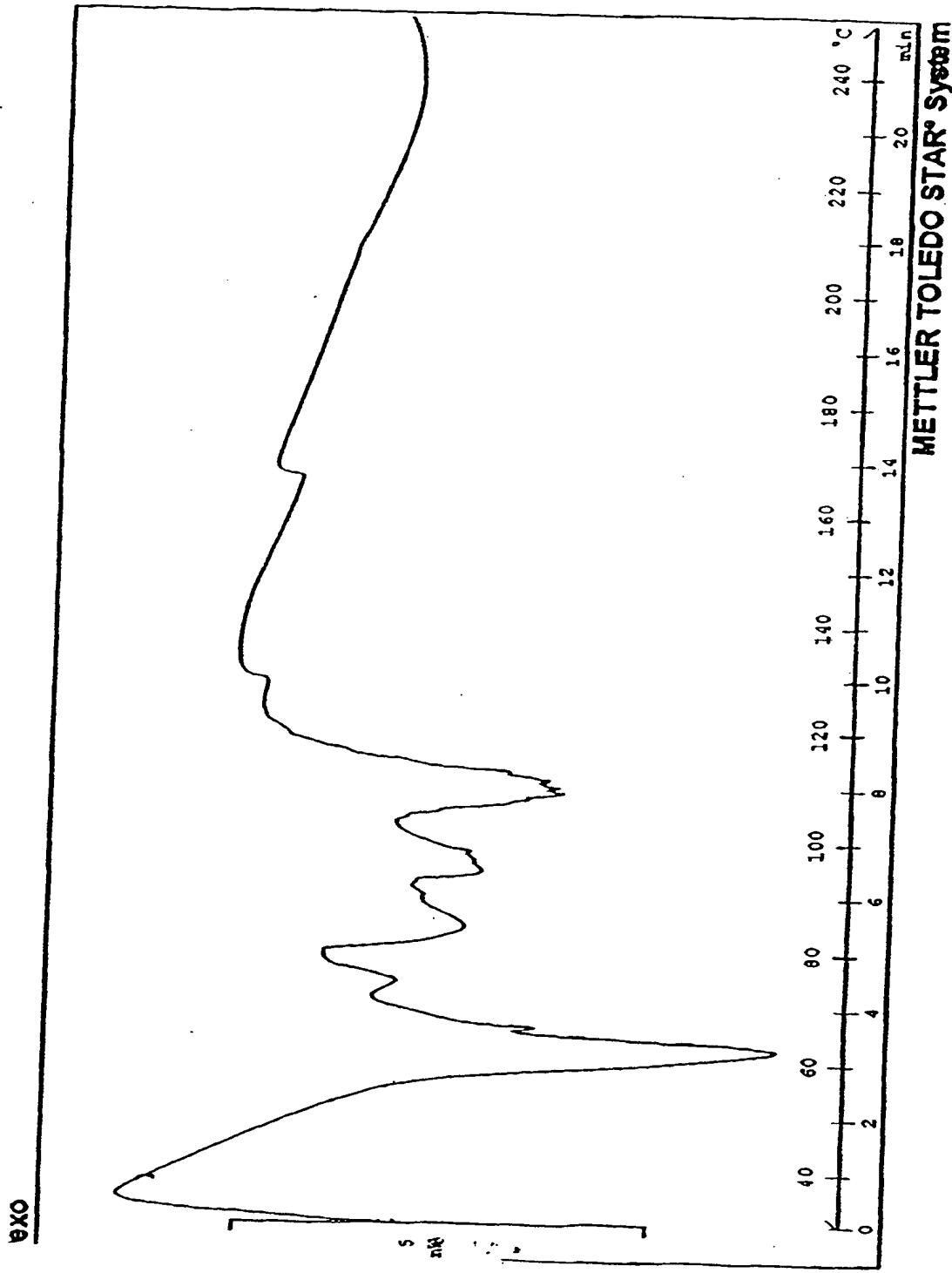


FIGURE 56
Form of

10

Method: 30~250C, 10C/min, 40mL/min N2
 30.0~250.0°C 10.00°C/min N2, 40.0 mL/min

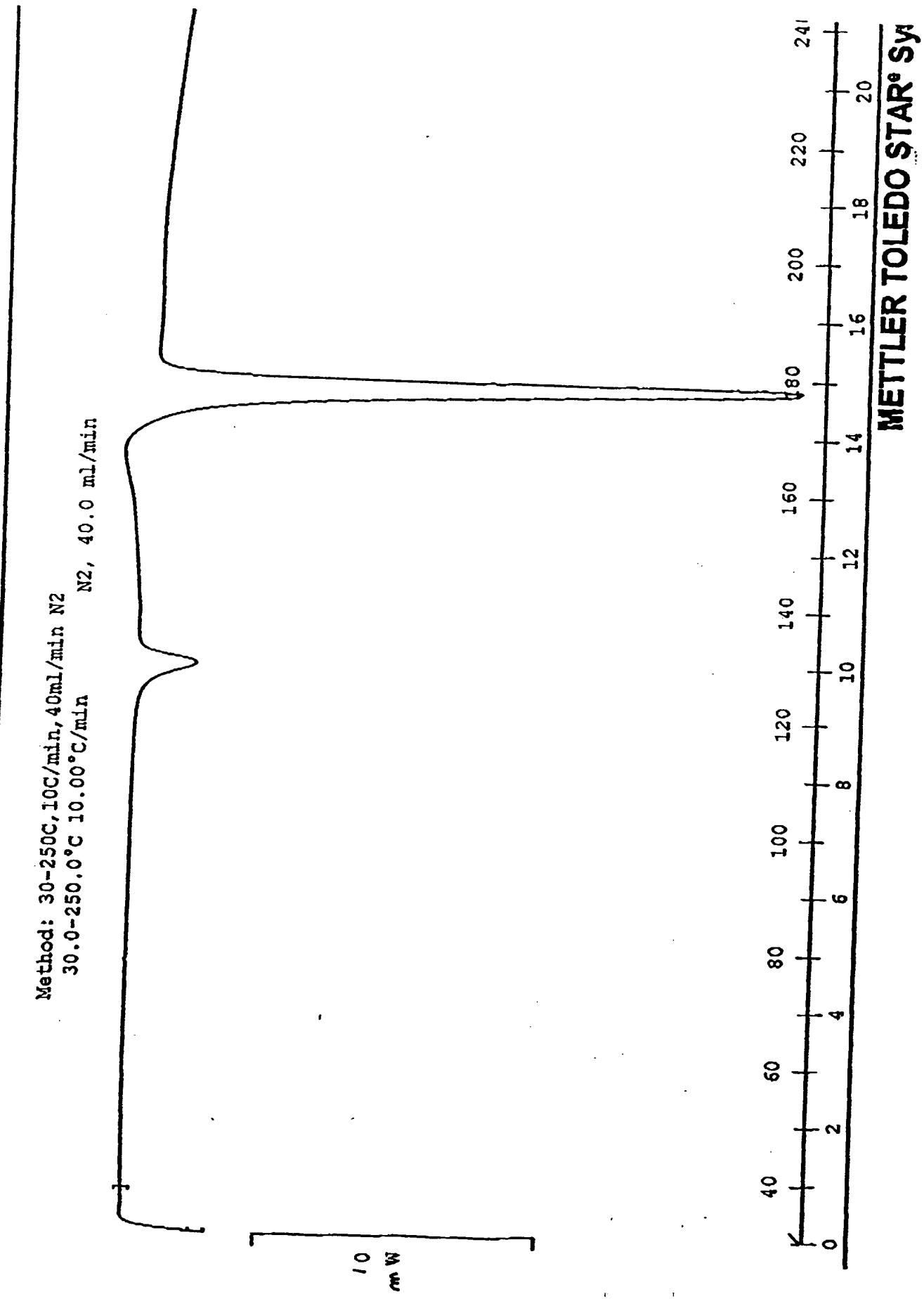
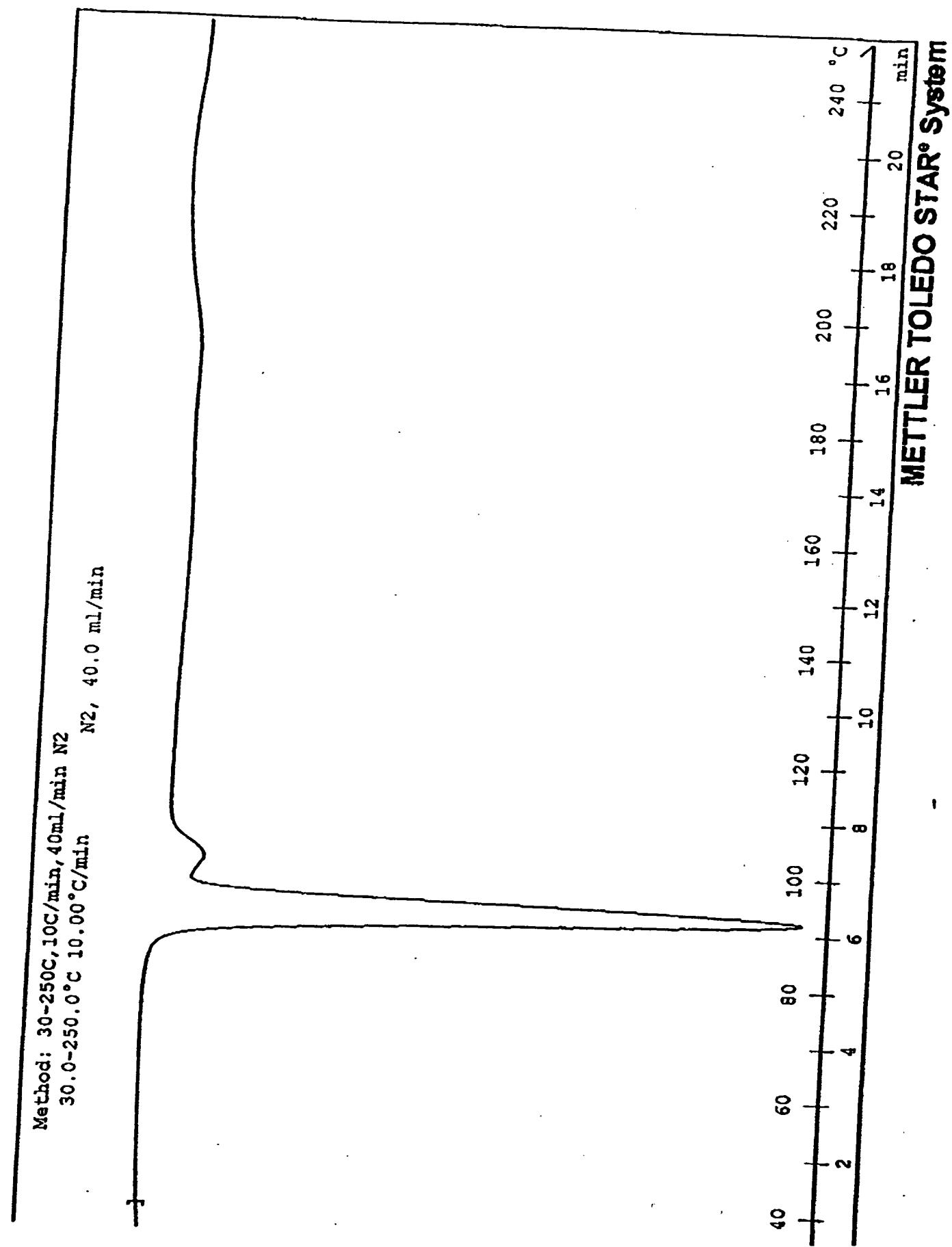


Figure 57
Form Beta

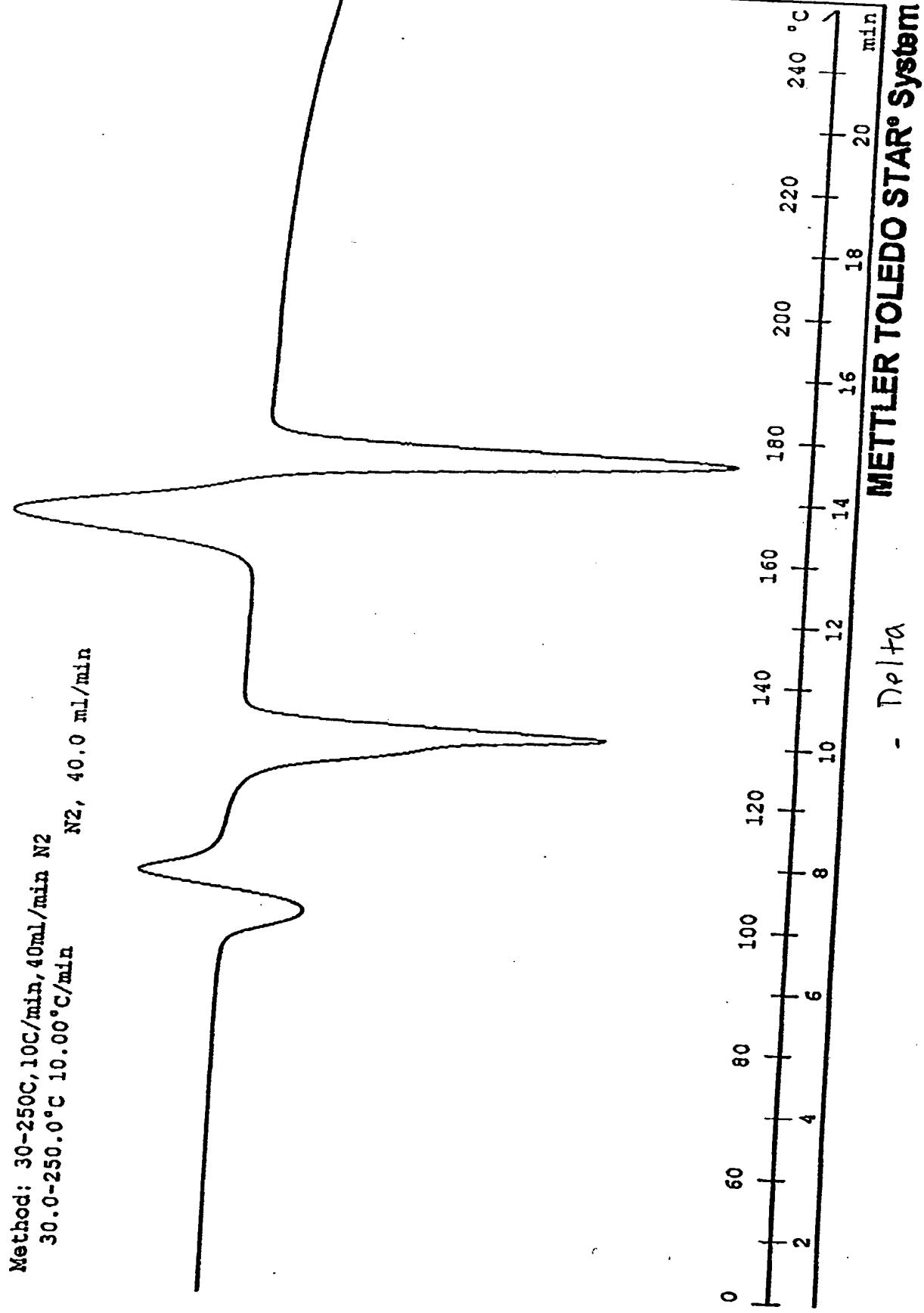
Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min N2, 40.0 ml/min



Form Delta

FIGURE 55-58

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min N2, 40.0 ml/min



- Delta

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Form Epsilon n FIGURE 59

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0 °C 10.00 °C/min
N2, 40.0 mL/min

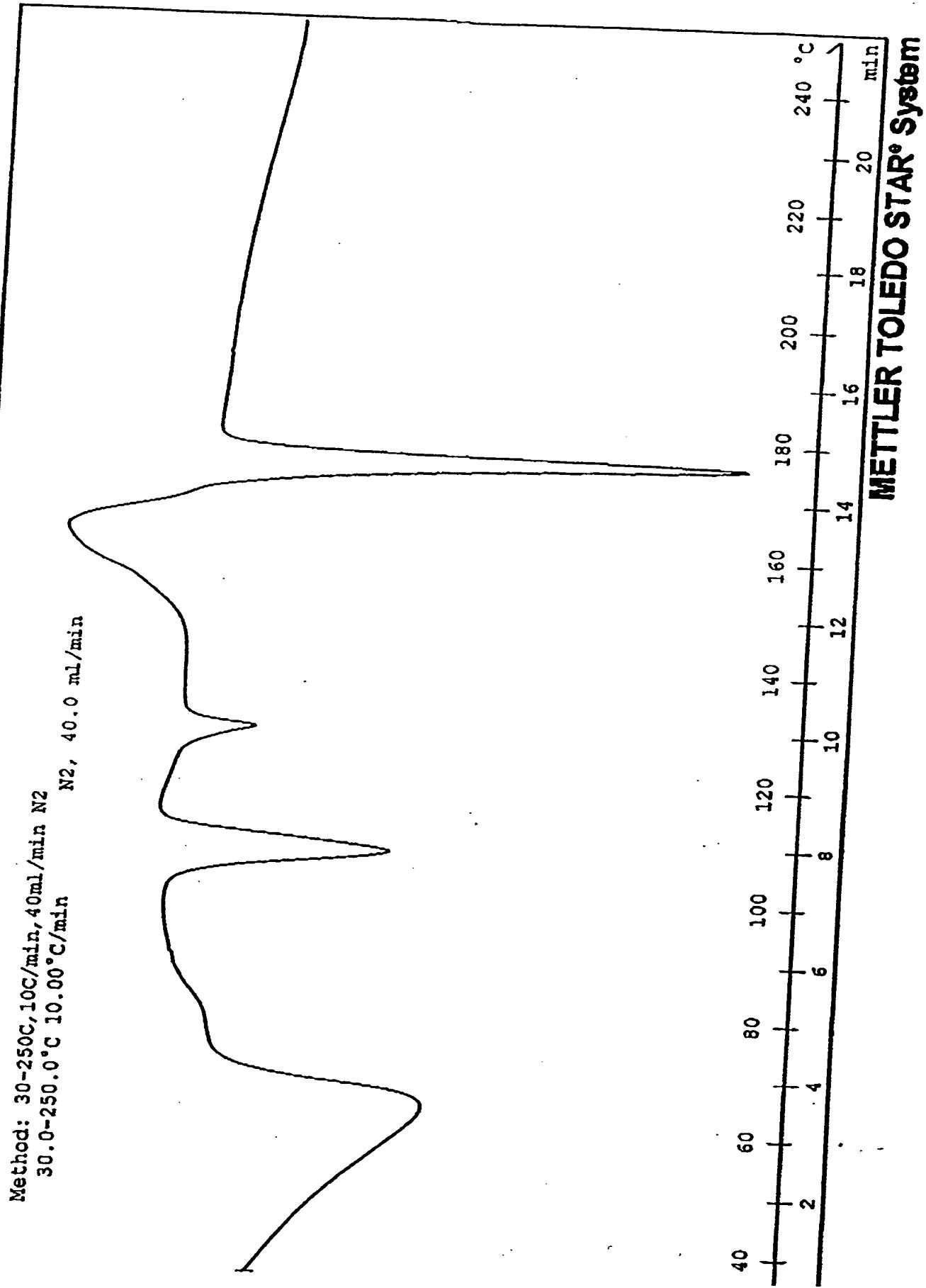
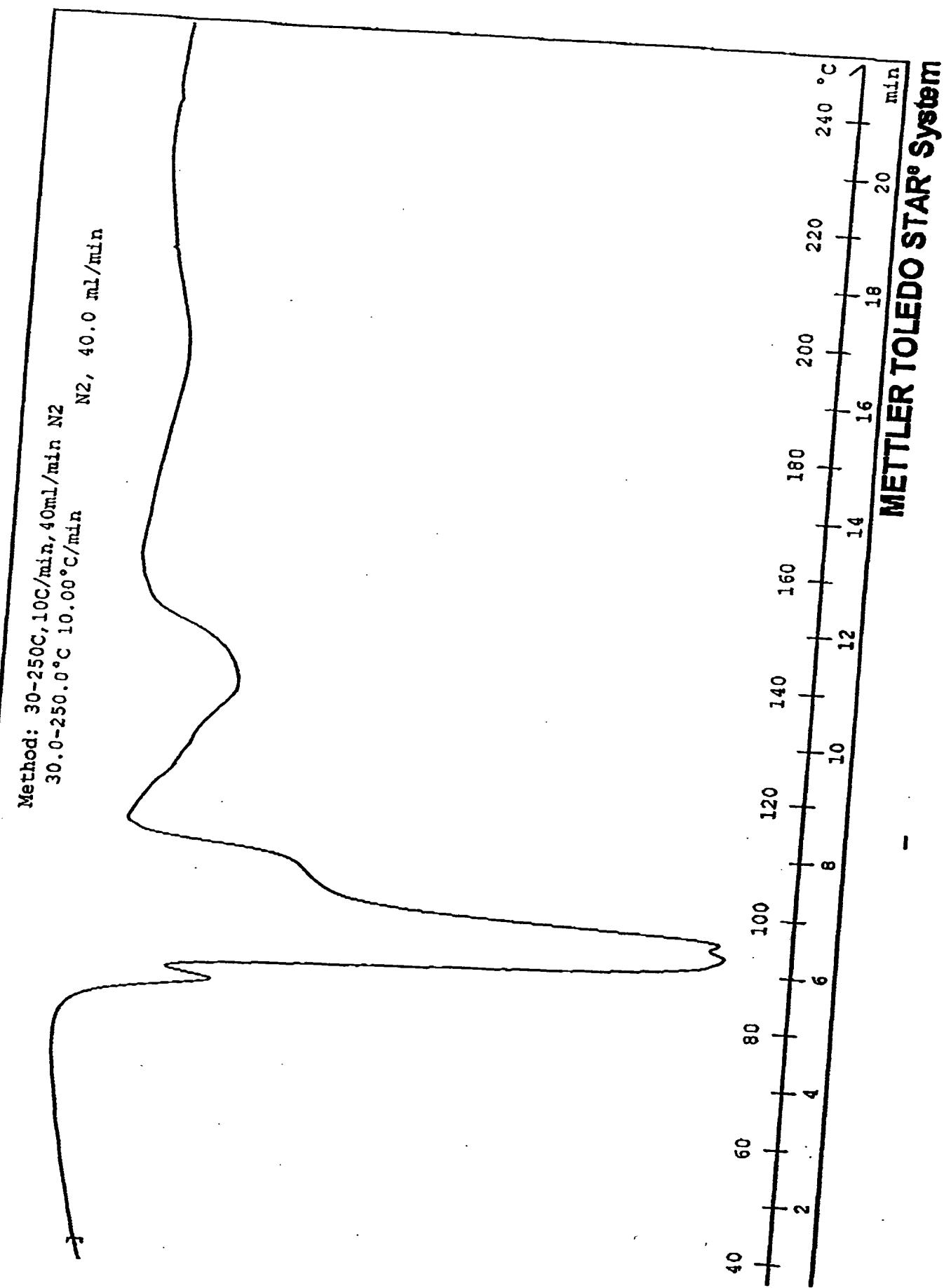


FIGURE 57 60

Form  Gamma

Method: 30-250C, 10C/min, 40ml/min N2
30.0-250.0°C 10.00°C/min N2, 40.0 ml/min



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Figure 61 Form Sigma

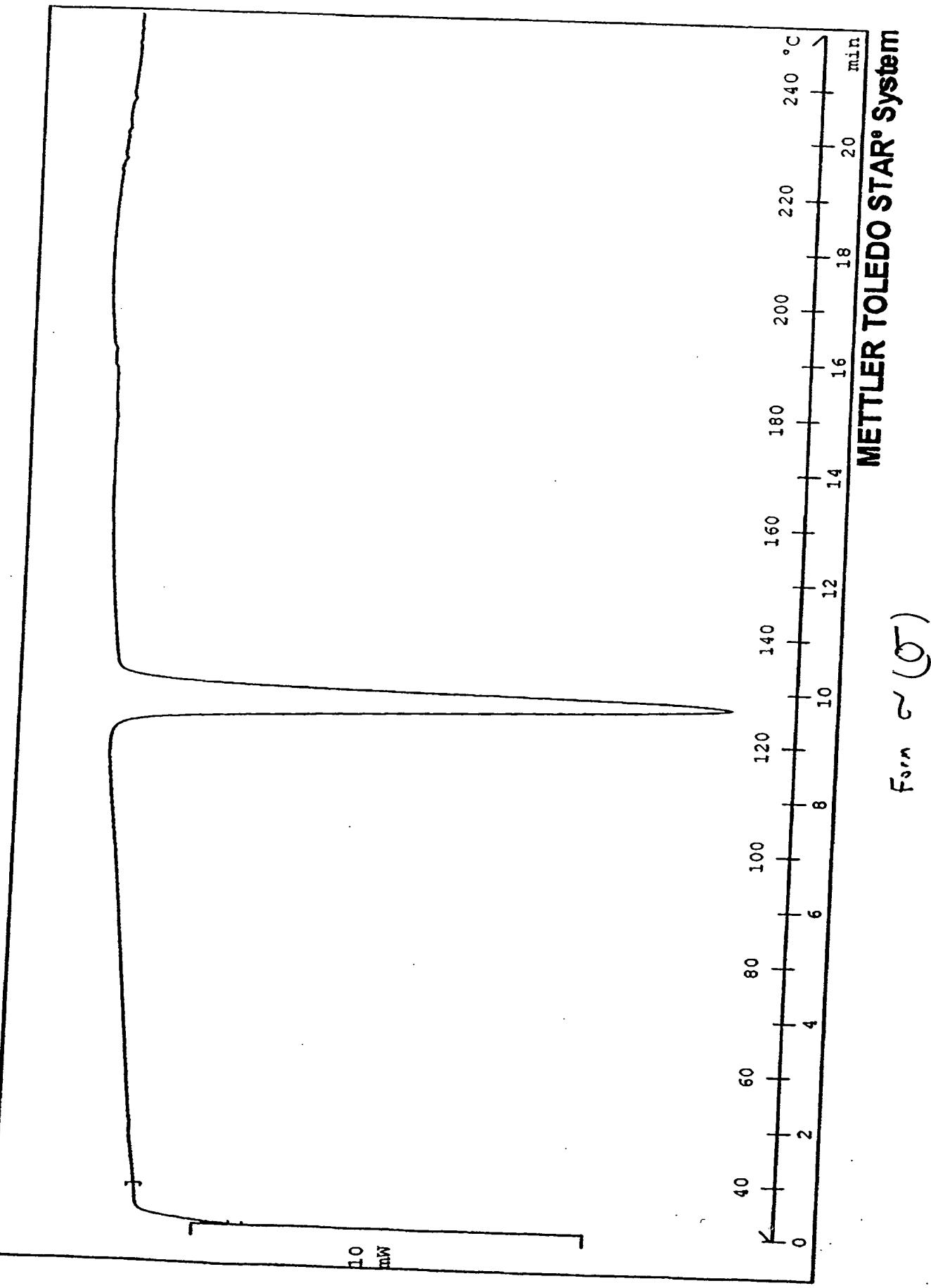


FIGURE 62 Form Theta

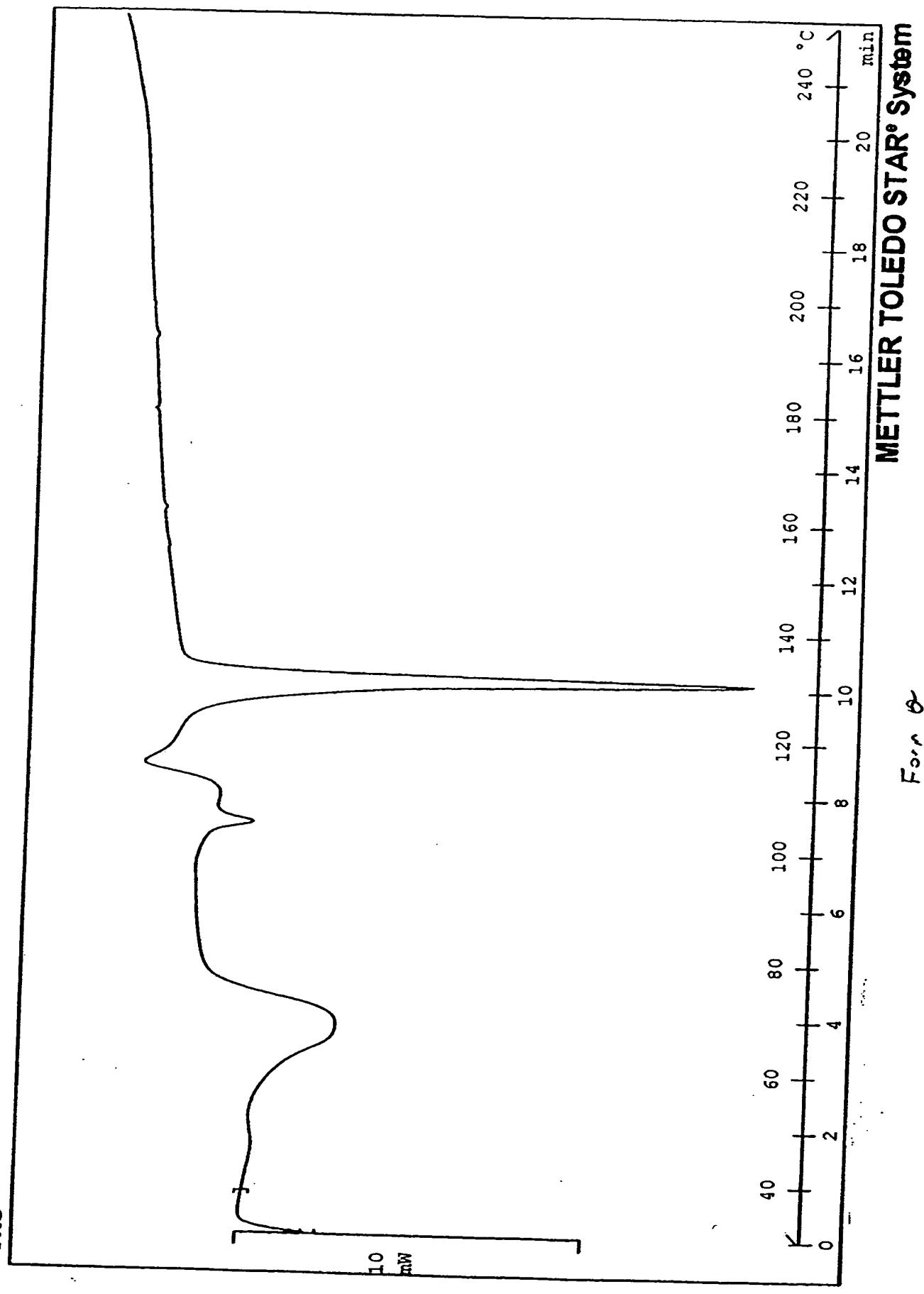


FIGURE 63

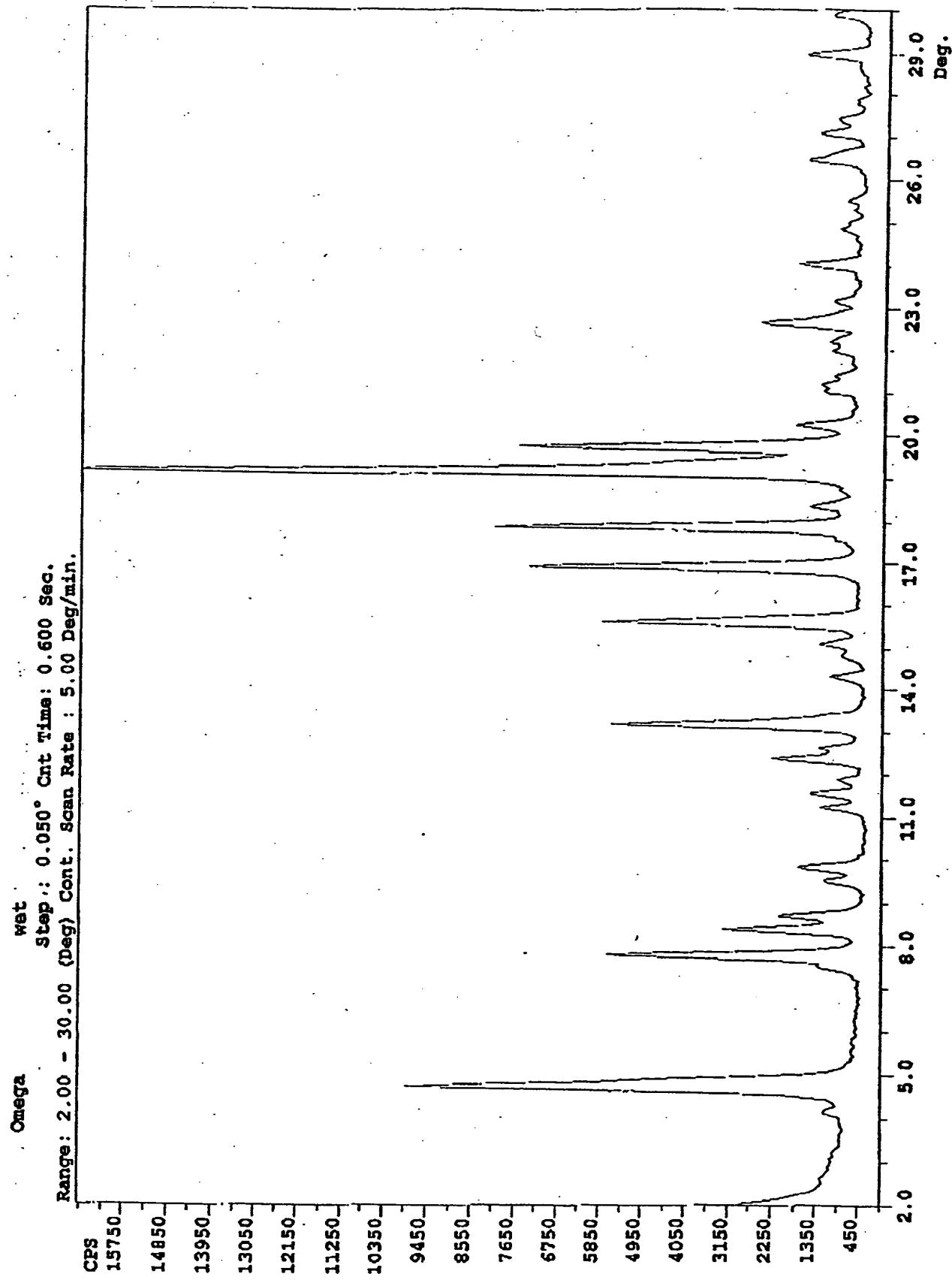


Figure 64

Comparison between the impurity profile of Nateglinide crystallized in IPA-H₂O and Nateglinide crystallized in Methanol-H₂O

Sample No	Solvent	Impurity profile by RRT [% w/w]								
		D-PA (0.23)	(0.25)	(0.46)	(0.80)	Ipcha (0.89)	Dimer (1.38)	Methyl Ester (1.51)	(1.76)	Isopropyl Ester (2.3)
RL-2155/1	Methanol-H ₂ O	<0.01		0.02	<0.01	0.03	0.02	2.91	0.04	
RL-2163/4	IPA-H ₂ O	<0.01	0.04		0.02	0.02	0.01		0.03	0.02

Note: D-PA means D-Phenyl Alanine

Ipcha means Iso propyl cyclohexyl carboxylic acid

Both are the starting materials of the product

(-)-N-[(trans-4-isopropyl cyclohexane)carbonyl]-D-phenylalanine